PATENT, TRADEMARK AND COPYRIGHT JOURNAL OF RESEARCH AND EDUCATION VOLUME 12 1968-1969

PAGES IN THIS VOLUME
ARE NOT NUMBERED CONSECUTIVELY

THIS VOLUME CONTAINS A SUPPLEMENT
PAGINATED SEPARATE FROM THE VOLUME

VOLUME 12
1968-1969
PAGES 617 TO 1208

CONFERENCE ISSUE
1968
PAGES 1 TO 246

Executive Views On Presidential Commission's Patent Recommendations: Medium-Sized Companies

IRVING H. SIEGEL* and GIDEON SCHMUCKLER**

THIS PAPER IS ONE OF SEVERAL emerging from studies conducted by The Patent, Trademark, and Copyright Research Institute of The George Washington University on the recommendations made in the 1966 *Report of the President's Commission on the Patent System.* It summarizes the views expressed by 36 presidents and other senior executives of medium-sized manufacturing companies on 8 of the Commission's 35 recommendations.[1] All the companies included in the canvass were known in advance to have had some recent experience with patent ownership and administration. For the purpose of the

* Dr. Siegel is a Principal Consultant to The PTC Research Institute. He is a member of the staff of W. E. Upjohn Institute for Employment Research, which shares no responsibility for views here expressed.

** Mr. Schmuckler is Patents Coordinator with the Technion Research and Development Foundation Limited, in Haifa, Israel. He is at present serving with the Institute as a Student Research Assistant for 1967-68.

[1] Views of company executives on three additional recommendations having international import (XXXIII, XXXIV and XXXV) will be treated in a later report. (See next paragraph of text and the concluding section.)

study, a medium-sized company is one employing not more than 1,000 persons but having annual sales of at least $1 million.

The respondents represented in this paper are associated with 10 percent of the companies actually surveyed by the Institute. They are considered in a separate article because they replied early and at some length. In the planning of the larger canvass, it was surmised that executives replying quickly would probably be more familiar with the patent system and the role of patents in company affairs and, therefore, would have more definite and better informed positions on the Commission's proposals. Many of the respondents covered in this article took advantage of space provided in the questionnaire for amplification of their replies and for comment.

RECOMMENDATION I

The first recommendation of the Commission, though brief, would make radical changes in the patent system:

> Prior art shall comprise any information, known to the public, or made available to the public by means of disclosure in tangible form or by use or placing on sale, anywhere in the world, prior to the effective filing date of the application.
> A disclosure in a U. S. patent or published complete application shall constitute prior art as of its effective (United States or foreign) filing date.

Spelled out, this recommendation would entail grant of a patent to the first to file an application (rather than the first to make the invention, as at present); abolition of the present grace period and of interference proceedings; and inclusion of worldwide public information (even public use or sale) as a "reference" citable by the Patent Office against claims.

Two groups of questions were asked about this recommendation, one relating to current company practices and attitudes, the other relating to probable company accommodation in the event the Commission proposals are adopted. The answers given to the first set of questions provide a basis for deeper interpretation of the replies to the second. It was assumed that, among companies having an interest in patents, those that are well adapted to current rules of operation would find extensive change most unsettling.

The first of the background questions asked was: "Has your firm ever been involved in interference proceedings?" The abolition of such proceedings is one of the objects sought in the abandonment of the "first-to-invent" principle in favor of "first-to-file." Surprisingly, a

majority of the executives, 22, reported that their firms had been involved in interference proceedings; 14 responded in the negative.

The next background question concerned publication of employees' ideas, research results, or patentable inventions before filing of applications. It appears, in general, that medium-sized firms have little propensity to reveal their creative endeavors in the early stages. What little is published by such firms, however, would likely remain concealed longer if the grace period were abolished. Few respondents report any publishing at all. Six firms publish employees' ideas, and only three publish patentable inventions before filing. Nine firms publish research results, the disclosure of which is obviously regarded as less risky. The remaining respondents expressly indicated that they do not publish ideas, research results, or patentable inventions before filing.

These responses should be considered together with those given to the first of the queries concerning possible reaction to enactment of the initial Commission recommendation: Would companies "tighten security precautions" if the first-to-file principle were adopted? Many companies are, of course, closed even now to outsiders, so it is impressive that 29 out of the 36 executives replied that secrecy would be made tighter. Some of the 5 executives who indicated that no greater precautions would be taken might be reflecting a belief that present arrangements are sufficiently strict. Two executives ignored the question.

Replies to two other background questions indicate that patent search is almost as common prior to initiation of a research and development project as search prior to filing a patent application. Where extensive investigations are required before filing, a grace period of some sort is obviously helpful. On the other hand, most of the medium-sized companies seem to devote little effort, if any, to the formulation of a really strong patent application. Although 24 of the 36 executives report a patent search prior to a research and development commitment, only 13 executives replied at all to the inquiry about prior search of other information before filing a patent application. Of these 13, only 4 expressly mentioned a search of the literature, while one added "advertising" and "directories." Still another firm referred to market research in advance of filing. Several respondents outlined conditions under which a careful preliminary patent survey would seem worthwhile. Thus, one company searched before filing only if the field was well established, and 2 others did so when knowledge was deemed inadequate.

Would adoption of Recommendation I of the Commission shorten an application's pendency and thus reduce the Patent Office's backlog? According to 19 of the 36 executives, the critical importance of being first to file would encourage an increase in the number of applications. On the other hand, 13 executives expected no change in the propensity to file; and 1 of these, joined by the remaining 4 in the group of 36, even anticipated a reduction of applications. This expectation of decline, however, may simply reflect belief that the first-to-file standard would increase resort to trade secrets for the protection of industrial property.

Another implication of the first-to-file concept is that applications would generally be filed earlier. This was the view of 29 of the executives, although 4 others did not expect to react thus. Taken together with the limited interest in prior search, this expectation of earlier filing does not augur well for the quality of new patents.

In view of the responses given to still another question, this prospect of quality deterioration in patent applications should not be dismissed lightly. Adoption of the Commission's first recommendation would apparently encourage 21 of the medium-sized firms to file mere ideas before effective trial "in the laboratory." One of these executives frankly stated that his firm would file "upon flimsy excuse." Among the remaining executives, 13 would not be so rash, and 2 said nothing.

An open-ended question regarding the effects of the first-to-file principle netted some additional insights into probable future behavior. Remarks by the six responding executives stressed the two themes of security and uncertainty. Mention was made of greater precautionary needs in the engineering department, stricter control of employees' speaking engagements, more guarded discussion of ideas with customers before patent application, increase in the number of applications for simple patents, and the advisability of filing on devices not fully tested or proved. One of the executives, taking a poor view of the new situation, lamely suggested that his company should "set up a patent application committee and indulge in one big poker game."

The last question with respect to Recommendation I deals with the implications of making worldwide public information a "reference." Would firms make searches in foreign countries; and, if so, where? As many as 17 of the 36 firms would have foreign searches made. The countries most frequently cited are Great Britain (14 cases), West Germany (13), France (12), and Japan (9). Italy, Holland, and Belgium were also listed (five times each), and so was Canada (4). One executive simply responded that the area of search would embrace "all highly industrialized countries."

A few remarks on these responses are in order. Obviously, making worldwide public information a reference would place a large additional economic burden on medium-sized companies and could thus work against quickening release of technical data. Foreign searches are costly—not at all comparable to, say, a rise in registration fees or other official levies. Furthermore, firms not now anticipating foreign searches might, nevertheless, finally feel compelled to make such studies for competitive and other reasons; so they, too, would experience higher patenting costs. If, on the other hand, companies were generally discouraged from making foreign searches, the Patent Office would have to assume the responsibility. Failure of the Patent Office to do so would increase the number of contested patents and thus reduce the value of an issued patent.

Recommendation II

The second recommendation of the Commission would substitute "preliminary applications" for the present grace period, which Recommendation I would abolish:

> A preliminary application may be used to secure a filing date for all features of an invention disclosed therein, if the disclosure subsequently appears in a complete application. Requirements as to form shall be minimal, and claims need not be included.
> One or more preliminary applications may be consolidated into one complete application filed within twelve months of the earliest preliminary or foreign application relied on.

Although few responding executives are associated with companies that tend to publish before the filing of patent applications, most would take advantage of the proposed substitution. The present grace period presumably does not benefit companies that do not publish before filing, yet 30 of the 36 executives say they would be interested in filing preliminary applications under the new system. Two have not yet made up their minds, and only 3 declared they would never file such applications. Despite the stipulation that "requirements as to form shall be minimal," 26 of the 36 executives, furthermore, would have patent attorneys draw up preliminary applications, while 6 would allow persons in other professions to do so.

The replies suggest that the introduction of preliminary applications would add substantially to the cost of patent prosecution—at least, per patent actually issued. This tangible cost increase would be in addition to other increases—entailed, for example, by complications arising from a multiplicity of effective dates and from possible

inconsistencies between preliminary and completed applications. Even now, the vast majority of responding firms make use of outside patent attorneys, and only 8 have a patent department or access to a pooled facility. Only 6 of the executives, as already noted, would entrust the drafting of preliminary applications to persons other than patent attorneys, 3 because they now do so and 3 because they consider preliminary applications to be easier to prepare.

If other comments made by the responding executives are to be taken seriously, the Patent Office should expect a flood of preliminary applications. One executive, for example, would encourage filing of "a large number of prelims on speculation." Another would "keep on top of developments and file quickly." Another would be prone to "file on ideas only." Still another expects to "make fierce efforts to brainstorm . . . all modifications . . . to obtain broad coverage." One executive, incidentally, would saddle the Patent Office with a new job: use of the preliminary application as a substitute for the present "letter of disclosure" filed with a patent attorney.

RECOMMENDATION V

The fifth recommendation, if enacted, would simplify the management of invention resulting from company research and development activity. It would extend certain privileges now embodied in Section 118 of the Patent Act:

> 1. Either the inventor or the assignee may file and sign both the preliminary and the complete applications.
> Any application filed by the assignee shall include a declaration of ownership at the time of filing and, prior to publication of the application, shall include a declaration of originality by the inventor and evidence of a recorded specific assignment.
> 2. Every application shall include, at the time of filing, the name of each person believed to have made an inventive contribution.
> 3. Omission of an inventor's name or inclusion of the name of a person not an inventor, without deceptive intent, shall not affect validity, and can be corrected at any time.

Of the 36 responding executives, 14 recalled difficulties, at one time or another, in determining the actual inventor and in locating inventors whose signatures were needed. Only 3 of these 14 would still like to have the inventor sign a patent application; the rest would be glad

for the relief promised by the recommendation. As many as 10 executives who had never had difficulties with inventors would still prefer to file (as assignees) over their own signatures.

Though medium-sized firms, too, could obviously find the new approach advantageous, the benefits would often prove temporary or illusory. When it is difficult to determine the actual inventor, the inhibition to file would surely be reduced by the proposed changes. On the other hand, as some of the respondents recognize, the relative ease of filing under the new rules could be more than counterbalanced by subsequent complications. Correct designation of the inventor or inventors, after all, remains legally important; and the deferral of difficulties should not be mistaken for circumvention.

RECOMMENDATION VII

The seventh recommendation of the Commission proposes that:

> Publication of a pending application shall occur eighteen to twenty-four months after its earliest effective filing date, or promptly after allowance or appeal, whichever comes first . . .

This change would publish information not now revealed that is contained in an unexamined or partly examined patent application.

The canvassed executives were asked about the uses to which published pending applications might be put. They recognized that the scope of prior art would be enlarged and that new opportunities would be provided for firms interested in patent development, acquisition, and licensing. Of the 36 queried executives, 23 reported that searches would be undertaken prior to the filing of preliminary applications, and 29 intended such searches before the filing of complete applications. Most of the executives (27), proposed review of published pending applications for evidence of new developments in their own industries; and a smaller majority (22), also considered perusal to be valuable for the avoidance of research duplication and for better planning of their own technical efforts. While 19 executives proposed to glean information regarding licensable inventions from the published applications, 14 others expressly stated that they would not do so, reflecting the common reluctance to enter into licensing arrangements. One executive regarded the monitoring of published applications to be useful for policing his company's own patents.

Early publication is recognized by executives of medium-sized companies to be a double-edged weapon. The risk involved in the rejection of an application in the new circumstances would encourage

22 of the 36 executives to have more careful searches made before filing. Such searches would, of course, improve the quality of applications. On the other hand, 26 executives would rather rely increasingly on keeping inventions secret, and 15 would be induced to file fewer applications. Such caution would not only reduce the Patent Office's workload but also restrict the dissemination of new knowledge.

RECOMMENDATION XI

The eleventh recommendation of the Commission proposes introduction of the so-called "opposition procedure" which, in effect, invites the public to cite any pertinent prior art after the Patent Office has completed its own examination of an application. This extension of the examination process, it is contended, would have a salutary effect on the validity of issued patents. The recommendation reads as follows:

> The Patent Office shall consider all patents or publications, the pertinency of which is explained in writing, cited against an application any time until six months after the publication which gives notice that the application has been allowed or appealed to the Board of Appeals.
> If the Patent Office, after the citation period, determines that a claim should not be, or have been, allowed, the applicant shall be notified and given an opportunity *ex parte* both to rebut the determination and to narrow the scope of the claim.
> The identity of the party citing references shall be maintained in confidence . . .

The proposed change would apparently not encourage the substitution of trade secrecy for patent protection. It might instead induce some tightening of security precautions (mentioned by 1 of the 36 executives) and, even more probably, encourage careful search prior to the filing of applications (mentioned by 19 executives). Of the 36 queried executives, 13 stated they would feel no requirement for an extensive search to minimize the danger of opposition by competitors. As for other precautions, one executive thought that the change would induce a broadening of claims, while another envisaged a narrowing of claims.

The replies generally suggest that resort to opposition procedure would be frequent. Most of the respondents, 26, said that they would submit information in their possession to the Patent Office, while only 9 thought they would take no such action.

A question was asked concerning the attitude of executives toward

opposition *ex parte*. The applicant, according to the recommendation, would not be informed as to the identity of the opposing firm. While 17 executives did not object to *ex parte* proceedings, an equal number expressed the preference for open opposition.

RECOMMENDATION XV

The President's Commission also proposed an additional period during which the public might act to narrow or reduce the protection granted to an invention through amendment or cancellation of claims. Parties outside the Patent Office would be invited to submit information on prior art for three years following the issuance of a patent. Under present law, only a court can alter the status or scope of a patent. Recommendation XV reads as follows:

> The Patent Office, upon receipt of a relatively high fee, shall consider prior art of which it is apprised by a third party, when such prior art is cited and its pertinency explained in writing within a three-year period after issuance of the patent.
> If the Patent Office then determines that a claim should not have been allowed, the patent owner shall be notified and given an opportunity *ex parte* both to rebut the determination and to narrow the scope of the claim.
> Failure to seek review, or the affirmance of the Patent Office holding, shall result in cancellation of the claim . . .
> Anyone unsuccessfully seeking Patent Office cancellation of claims shall be required to pay the patent owner's reasonable cost of defending such claim, including attorney's fees. The Commissioner shall require an appropriate deposit or bond for this purpose at the start of the action.

The proposed change could have profound effects if enacted. Availability of the new procedure for amending or cancelling claims of issued patents ought to raise the caliber of patent applications and to reduce correspondingly the Patent Office workload and the average processing time per patent. On the other hand, the risks attendant upon the new procedure might drive companies toward greater secrecy and prove discouraging to independent inventors who have no interest in setting up their own businesses to exploit patents. Furthermore, the possibility of claim amendment or cancellation could have an adverse effect on licensing, since more complicated contracts would have to be drawn up and enforced.

To minimize the risks entailed in cancellation and amendment proceedings, two thirds (24) of the questioned executives believe that more careful searches would be required prior to filing applications.

The remaining third deemed such extra caution to be unnecessary. The threat of cancellation, nevertheless, would encourage 21 of the executives to consider keeping inventions secret where possible (e.g., process inventions). Furthermore, most of the executives (23), declared themselves willing to institute proceedings against a competitor's patent, while 10 other executives did not feel so inclined.

An attempt was made by direct queries to ascertain the possible effects of the change on patent licensing. Half of the executives (18) believed that their license agreements for obtaining and offering the use of inventions would have to be modified. These modifications would include disclaimer of liability, reduction or waiver of license fees, and the introduction of appropriate "hold harmless" and other contingency clauses. One executive even expressed doubt as to the feasibility of licensing before expiration of the three-year period.

Recommendation XVII

The seventeenth recommendation is concerned with the novel concept of "interim liability," a concept that acquires pertinence when patent applications are published prior to examination:

> For infringement of a claim which appears in both an application as initially published and in the issued patent, damages may be obtained for an interim period prior to issuance. Such period shall be measured from after the occurrence of all of the following events:
>
> (1) the initial publication,
>
> (2) a Patent Office holding that the claim is allowable, and
>
> (3) a transmittal to the alleged infringer of actual notice reasonably indicating how his particular acts are considered to infringe the claim.
>
> The applicant's election to create such interim liability by his transmittal of notice, shall constitute the granting of a reasonable royalty, non-exclusive license,
>
> (1) extending only until the issuance of the patent for any infringement involving a process, and
>
> (2) extending to and beyond issuance for any infringement involving a machine, manufacture, or composition of matter, which is made prior to the issuance of the patent . . .

Because of the novelty of the concept involved in this recommendation, respondents could not draw on experience and may in some instances have resorted to advice by patent counsel. The replies plausibly suggest that advantage would be taken of the interim liability provision when profitable.

Executives were asked if their reactions to notice of infringement of allowed claims in patent applications would differ from reactions to

notice with respect to claims in issued patents. Of the 32 executives replying, only 11 said that they would make such a distinction. "We would evaluate cost of the reasonable royalty," a respondent observed, "versus loss from withdrawal from infringement and versus probability of upsetting the claim." Only one respondent declared he would cease infringement at once if challenged.

Another question was aimed at the distinction made in the recommendation between (a) process inventions and (b) patents for machines, manufactures, and compositions of matter. Most executives (19) would take advantage of the recommendation in either case, but 6 would act in neither. Among the other respondents, 3 would take advantage of the recommendation on infringement of a claim allowed in a patent application for a process only, and 2 would take advantage of the recommendation only if nonprocess inventions were the subject of infringement.

Recommendation XVIII

"The term of a patent," according to Recommendation XVIII, "shall expire 20 years after its earliest effective U. S. filing date." Thus, a unique characteristic of this nation's patent law—the reckoning of a patent's force from the date of issue rather than the date of first application—would be eliminated. The change would, in effect, assume a uniform pendency period (i.e., the time lapse between the filing of an application and the issue of a patent) of 3 years.

Since the proportion of patents requiring more than 3 years of pendency is substantial, the proposed change is not a matter of indifference. Perhaps, Patent Office procedures and staffing levels could still be suitably modified in the interest of sharp and general reductions of the period of processing. Certainly, no equivalent speedup in the issue of patents would result from actions taken only by inventors and their representatives.

The 36 responding executives indicated that 71 patents required more than 3 years to issue and that 273 other patents had pendency periods shorter than 3 years. The range was considerable, with pendency varying from as long as 10 years to less than 1 year. One executive stated that all of his firm's applications were processed in fewer than 3 years, but 2 other executives complained that all applications required more than 3 years. Long delays were generally blamed on the Patent Office; only 1 executive blamed inadequate preparation by his own attorney; and none of the respondents had any

suggestion for procedural adjustments to make the proposed revision workable without discrimination. Specific causes of delay were occasionally cited—e.g., a Secrecy Order, or the requirement of divisional or continuation applications.

Executives' General Comments

Space was provided at the end of the questionnaire for volunteered observations by the responding executives of medium-sized companies. Several of the executives (13) took advantage of this opportunity to express opinions on the operation of the patent system and on the Commission's recommendations, especially the first-to-file principle. Their views are summarized below.

It is not surprising that the Commission's charge to take a fresh look at the U. S. patent system should inspire respondents to vent their own dissatisfactions with "the way things are." One executive, for example, points to the poor quality of the patents that his company has to acknowledge. His patent counsel seems, with increasing frequency, to report that the patents with which his firm's ambitions are in conflict "should never have been issued" or "could not stand up in court." If economic space is indeed being cluttered with patents of dubious technological merit, then infringement and litigation could become increasingly attractive even to smaller firms and to newcomers striving for elbow room. Another executive, the president of a chemical firm, reports that his company has not been actively pursuing patents in recent years since the net advantage of filing is problematical. Patents "provide competitors with valuable information," and "the cost of enforcing our position is usually not justified, particularly when slight formula modifications . . . render your patent relatively useless!"

Such adverse evaluations of the patent system were expressed by only a minority, but other observations volunteered by respondents also reflected little complacency. One executive, for example, wondered which of the many intended beneficiaries of the patent system should be paramount, in view of the inconsistency of the rewards: "The inventor? The company? The nation? The patent attorneys? The government?" Two other executives expressed concern about the already difficult plight of the "individual inventor." The proposed changes could make the system less accessible to the little man, who presumably needs protection most.

Strong opposition was expressed to the first-to-file principle. Indeed, none of the 13 executives made any favorable comment on this

proposed change. Four who had experience with interference proceedings, the evil that the proposed change is intended to abolish, were particularly outspoken in their criticism of the principle. One of these hostile executives predicts that the proposed change would result in "further chaos and confusion." Another opponent foresees "a rat race of opportunists and second-guessers who will file unperfected . . . preliminary applications to beat out competitors who are working seriously on an invention." This challenge, alas, would call forth "a plethora of hair-splitting, difficult-to-prosecute subsequent applications from the true inventors." He also foresees encouragement of "industrial spying," of "irresponsible and trivial applications," and of increased abandonments and appeals—and the discouragement of "proper development." According to the third declared opponent, the substitute principle would seriously limit "creative discussion" among engineers, scientists, entrepreneurs, and prospective customers. The fourth critical executive expects "a race to the Patent Office" that is incompatible with "sound patents based on valuable inventions." Indeed, "a vague preliminary application with unrefined details" entered by A "could destroy a carefully worked-out invention" made by B; the latter is now properly favored "because the only prior art would be other refined workable disclosures, not a vague preliminary application." Finally, a heavier burden on the Patent Office is expected: "Only 1 out of 20 ideas ever gets from the research stage to development, and only 1 out of 5 of those coming out of development is commercially successful. . . . Most companies now desire to file at the 1-out-of-5 level . . . Under 'first-to-file' they would inevitably file at the 1-out-of-20 level."

Concluding Observations

This report on the opinions of senior executives of 36 medium-sized manufacturing firms is provisional on three accounts. First, it will be followed by another one summarizing the views of a much larger number of executives responding to the same questionnaire. Second, the larger report will also include comments by the executives on three Commission recommendations concerned with international patent harmonization. Third, whatever the number of executives canvassed and however informed their views, significant deviation of actual future behavior from current expectations is inevitable.

On the whole, the respondents to the questionnaire cannot be characterized as enthusiastic about the changes proposed by the Commission. The general mood is cautious skepticism, rather than cautious

optimism; and, although indifference may occasionally be shown (as in the case of interim liability), definite antagonism to some proposals also emerges (e.g., with respect to the first-to-file principle and the inclusion of worldwide information in prior art). Simplifications are welcomed, but respondents become ambivalent when they visualize possibilities of deprival as well as benefit that are latent in proposed improvements. They exhibit understandable sensitivity with respect to their competitive position, costs, equity, uncertainties, and delays. They suggest or emphasize perverse and inadvertent potential effects, such as increased Patent Office workloads, lower patent quality, a higher incidence of infringement and litigation, enforced retreats toward trade secrecy, and new impediments to the flow of technical information.

The general reaction of the respondents may be no different from that evoked by recommendations for fundamental change in any long-established system with acknowledged defects requiring remedy. Attempts to solve old problems, however, also engender new problems, as experience shows and as businessmen are so alert to project. On the other hand, experience also shows that substantial changes in systems can be assimilated, that businessmen and others can "learn to live with" revisions that at first they do not favor or even openly oppose. When extensive alterations are proposed for established institutions, common sense suggests that account be taken of whatever early evidence can reasonably be gathered with regard to prospective net outcomes. It is the purpose of this paper, and of the more comprehensive one that will follow, to present such evidence—in the guise of informed opinion of sampled members of a group that would definitely be affected by the adoption of the recommendations of the President's Commission on the Patent System.

Patents and Trade Secrets: Instruments of Positive Competition**

L. JAMES HARRIS*

NATURE AND SCOPE

THIS EVENING I PLAN to bring into conjunction three subjects that are of particular research interest to me. One of these is patents, a matter that I know is also of great interest to my audience. The second subject is trade secrets, a topic that is of growing importance to individuals and organizations engaged in R&D. The third one is "positive competition," a formulation, in a sense, of the basic Eighteenth Century liberalism and rationalism which constitutes the *raison d'être* for a patent system, or any system that provides for the protection of property.

* Director of The PTC Research Institute and Professor of Law, The National Law Center, The George Washington University.

** The Jefferson Medal Award Address given by Professor Harris at the Award Dinner of the New Jersey Patent Law Association on Friday evening May 3, 1968, at the Robert Treat Hotel, Newark, New Jersey. The New Jersey Patent Law Association selected Professor Harris as the 1968 Jefferson Medalist "in recognition of his noteworthy service and important contributions to the fields of Patents, Trademarks, and Copyrights."

It should be stated at the outset that by the term positive competition I am denoting the dominant legal-economic behavior that is involved in our production and distribution system. Or, to put it another way, it is the behavior of individuals and groups acting in accordance with general economic principles, in accordance with the rules of the game. This type of behavior is so familiar, so normal, that it's taken for granted. It is also taken for granted because it generally works—unlike the smaller, spectacular and pathological fringe behavior that is so troublesome to the Federal Trade Commission and to the Antitrust Division of the Department of Justice.

Unlike the hypothetical models proposed by certain authors which are supposed to approximate reality to a greater or lesser degree (even as "workable" competition), the competition we are talking about here is "positive" because it stresses the empirical, or factual approach, rather than the speculative approach to the examination of legal-economic practice. In short, it's the competition that fair trade laws, antitrust laws, and court decisions seek to protect. To compile a catalogue of the features of positive competition is a very difficult task. The list would be incomplete, not only because of the all-pervasiveness of its attributes, but also because of the dynamic forces in our economy which constantly require reinterpretations in new surroundings.

In a paper published in 1959, Dr. Siegel, a Senior Economist on our Research Staff, and I introduced the concept of "positive competition" to direct attention to the pervasiveness of competitive behavior as the dominant feature of our economic-legal system. We chose the word "positive" to describe the totality of economic behavior that actually prevails in our system because of its special productive and progressive nature; and we were also influenced by a statement in a treatise on *Scope and Method of Political Economy* written by J. N. Keynes, who distinguished between a "positive science," consisting of a "body of systematized knowledge concerning what is" and a "normative or regulative science" relating to "criteria of what ought to be." Thus, the term refers to attitudes and actions "positively" contributing to our economic and social well-being, to peaceful transactions with other countries, and to the improvement in productive techniques, including technological innovation and diffusion. From the nature of positive competition, thus stated, Dr. Siegel and I have derived certain principles of positive competition, and this evening I shall make an effort to apply some of these principles to patents and trade secrets to demonstrate the economic and legal performance of patents and trade secrets as instruments of positive competition.

A discussion of industrial property as an element of our enterprise system is important because of the problems disrupting our pluralistic society at this time and the current efforts to improve certain aspects of the law on patents and on trade secrets. Serious threats are being made to American institutions, to American values, and to American traditions. Most concerned Americans are acutely aware of, and dismayed by, the situation. Some of the more publicized threats include: the Vietnam impasse, loss of private initiative to government, concensus in politics and in government, declining ethical standards, hedonistic blight of prosperity, shifting attitude toward welfarism, civil rights riots, crime, urban deterioration, technological explosion, low quality mass media subject matter, caretaker executives, mobility of technologically trained personnel, and inflation. Although there is ground for dismay in such a dire catalogue, there is also a challenge to do something constructive. For example, persons engaged in matters relating to industrial property might seek to understand the important relationship of industrial property to our economic and legal systems so that they might better utilize the potential of this property for private benefit and for the public interest.

The patent system replaced the system of trade secrets which existed in the guilds during the Middle Ages. In medieval Europe, ideas were restricted to the needs of individual guilds and, in certain instances, technology died with the demise of the membership. Knowledge and learning flourished anew in the Renaissance, and the stage was reached where technological knowledge, and society itself, were becoming complex and relations and operations had to be more organized to serve the needs of the public. In more primitive societies simple barter sufficed. As society became more complicated it was necessary to devise an instrument to accomplish transactions in technological knowledge for large and variegated publics with fairness and efficiency. The patent system is one of the methods evolved to satisfy this requirement. With the introduction of such a system, the disclosure of trade secrets to the public was encouraged in return for a monopoly right for a limited period of time.

However, patents and trade secrets are both instruments of positive competition to the extent that they contribute to the public welfare and private benefit. To the extent that they actually enter into the process of creation, diffusion and application of useful technological knowledge do they so contribute.

Since I propose here to transform certain principles of positive competition into standards, some additional reference to their derivation is first required. From what I have thus far stated there are two

types of legal-economic conduct in our society. One is the small fringe of exceptionable conduct that receives considerable attention in the press and in other information media. This relatively uncommon behavior which is repressive and interferes with the freedom of choice by, and opportunity of, others does occur and, if it has not already been interdicted, it probably will be challenged sooner or later. Our concept accepts the existence of this deviant conduct, but characterizes it as "deviant" or "abnormal."

The principles of positive competition which we have indicated are what might be agreed upon or expected as guidelines in any effort to compile a catalogue of the attributes of the vast area of "normal" conduct that legislation and the courts seek to protect and foster. We think that such deduced principles suggest rules for sound decision. It is, of course, anticipated that there will be disagreement with the standards we deduce and that economic and social progress will inevitably require certain changes, but our criteria can be accepted as a first approximation to general rules for proper judgment of the relations of man to man, and man to society, because these standards are compatible with domestic welfare, political freedom, international opportunity, and the profitable use of technical information—objectives consistently advanced by the two major parties in this country.

The introduction of standards for positive competition and the application of these standards to industrial property should help strengthen the basis for respectability of this property. An appreciation of the performance and potentialities of patents and trade secrets should also provide a better perspective from which to judge the need for constructive legislation.

According to our understanding of American economic and social history, Dr. Siegel and I have indicated at least 11 principles of positive competition. These may be viewed and savored at your leisure in Vol. 7, No. 3, pages 256 and 257 of *IDEA,* The Patent, Trademark and Copyright Journal of Research and Education.

The basic premise of these principles is to accommodate the private interest and the public interest in harmony with American traditions of equity and fairness. Our goal is to describe the kind of attitude and conduct which generally exists, and should be encouraged, to maintain the full force and effect of positive competition. Instead of a focus on control, as provided in the laws and court decisions, particularly those relating to competition, the perspective we suggest is the maintenance of significant economic and legal freedom of private interests to better serve the public interest. Even as positive competition is the land of "it

is" and not the land of "ought-to-be," it is also not the land of "thou shalt not." Thus, we are proposing to establish standards for "economic freedom," for "competition and free markets," for "the private competitive economic system," upon which the "Congress has repeatedly declared its reliance . . . as the primary method by which essential energies are released for industrial activity and for technological development." Thus, these standards must reflect a mixture of ethical, political, economic, legal and social doctrine.

In view of the scope of this vast area of behavior, standards should be stated tentatively and perhaps, at the outset, in the form of questions. From an examination of our principles ten essential questions appear to be:

(1) Does the conduct tend to foster incentives rather than restraints?

(2) Does it encourage the expansion rather than the limitation of participation in economic and social affairs?

(3) Has the conduct, or transaction as the case may be, been accompanied by a greater abundance of goods and services per capita and an increase in the public welfare—including longer life, better health, shorter and less arduous work week, and the maintenance of broad opportunities for choice in occupation and in the marketplace?

(4) Is this conduct in line with the framework of rules we have accepted that govern the relation of man to man?

(5) Does this conduct, or transaction, stress rewards for those who observe the rules rather than simply penalties for those who break them?

(6) Does the conduct emphasize the enlargement of the good of the many, rather than the risk of diminishing the good through stern protection from possible anti-social behavior of the few?

(7) Does the conduct recognize the self-interest of the individual and groups, and tolerate voluntary and open association to advance common objectives with due regard to third parties and the public at large?

(8) Does the behavior seek to avoid the erosion of economic and political freedoms, especially through the inadequate exercise and defense of existing rights, to avoid the atrophy of those rights so that by a test of representative cases the law can meaningfully evolve to serve the broad needs of changing times and circumstances? (For example, the public interest is better served by energetic defense of challenged private actions than by routine acquiescence in consent decrees.)

(9) Does the behavior look to a permissive rule of reason and call for the weighing of all pertinent circumstances before the condemnation of particular practices, in view of the subtleties of competition?

(10) Is the behavior informed by a clear and consistent understanding of national purpose that might appropriately be pursued in the realm of international transactions so that laws designed for regulation of internal affairs are not blindly applied or extended literally to foreign transactions?

It is, of course, recognized that the answers to these questions may occasionally be inconsistent for given cases. This is inevitable in a pluralistic society with competing interests and values. Accordingly, weights may have to be attached to the different answers in order to arrive at a judgment of maximum benefit to positive competition. We should not object to the idea that judicial decision is not yet obsolete.

Positive Competition and the Patent System

If we apply these standards to the patent system, it is clear that the so-called "monopoly" of the patent has provided opportunities for both social advance and individual profit. I intentionally modify the word monopoly in referring to patents by the term "so-called," because the patent does not monopolize an invention already in the public domain; the patent does not remove from the public that which it previously possessed. Patents have, of course, been abused, but it is the abuse which must be remedied. It is not desirable to undermine the monopoly. Wigmore states the idea pungently:

> If two or more citizens between them own all the pepper or all the molybdenum and pool their control to put up prices, there is cause for remedying their abuse. So, too, for two or more patent owners, but the important thing nowadays, for clear thinking and correct remedy, is to distinguish—alike in the case of pepper and patents—between the original monopoly rights—which are alike in merit—and the abuse of them.

In fact, we have noted in the Institute's studies of the role of patents among other factors in the creation and growth of small industrial units, that the patent is often used to establish a relationship between large and small companies; they may economically supplement each other, with large firms licensing freely to small ones. This is a mode of positive competition.

Patents contribute through the protection they offer inventions for the utilization of new devices for the improvement of the individual's

or company's economic position. Empirical studies of the Research Institute have shown that an impressively large proportion of patented inventions are used commercially. The patent system also protects the licensing of patented inventions to other companies beyond the licensor's own ability to exploit his property. A study of the Institute indicates that, with few exceptions, patentees are willing to license, and another Institute study shows that by means of licensing arrangements many American companies have been extending the geographic scope of their operations considerably. Licensing facilitates the conduct of business operations, and third parties are thereby enabled to share the benefits of advancing technology. This pattern is consistent with the notion of positive competition.

By making advances public the patent system facilitates further advances. Disclosed technical knowledge provides opportunities for inventors to invent around the previous advance. It also provides a base for development of new research and diversification activity. Studies of the Institute have shown various modes by which firms in different industries utilize patented inventions and that the availability of new products and processes has provided the opportunity for the establishment of new businesses. The progress of technology through interaction is again a manifestation of positive competition.

The judges in their decisions have interpreted the standards of patentability established in the statutes in accordance with the changing technological, economic, and social characteristics of our society, and the more recent decisions appear increasingly to reflect an appreciation of the social benefits derivable from the patent system. The encouragement of invention, the disclosure of invention and its dissemination, encouragement of investment in and exploitation of invention, and the provision of means for rewarding inventors, have all been purposes ascribed to the patent system. In the introduction to the *Report of the President's Commission on the Patent System,* the Commission sets forth in some detail the benefits provided by the system. In the fourth benefit, the Commission points up an important international consequence: The patent system promotes the "beneficial exchange of products, services, and technological information across national boundaries by providing protection for the industrial property of foreign nations." Such exchange clearly accords with our view of positive competition.

But American courts have considered rewards to inventors as secondary to progress in science and useful arts, the justification stated in the Constitution. In the *Graham* v. *Deere Co.* decision, Justice Clark, in explaining and supporting progress of the useful arts as a standard

of invention written into the Constitution, makes the following statement:

> Innovation, advancement, and things which add to the sum of useful knowledge are inherent requisites in a patent system which by Constitutional command must "promote the progress of . . . useful arts." This is the *standard* expressed in the Constitution and it may not be ignored. And it is in this light that patent "validity requires reference to a standard written into the Constitution."

Disregarding, for our purposes, the question of whether the clause establishes a standard for the patent system rather than a standard for the patentability of an invention, this excerpt from Justice Clark's opinion does afford an opportunity to appreciate the merit of the patent system as an instrument of positive competition on the basis of the high legal standard actually used by the Supreme Court in evaluating inventive contributions made under the system.

Positive Competition and Trade Secrets

Trade secrets are also potential instruments of positive competition. The publicity attending recent trade-secret litigation obscures the predominant normal situation. In view of the volume and variety of trade-secret business actually transacted, it is surprising that explicit resort to law enforcement is so occasional. Trade secrets encompass every kind of information that a firm would like to keep confidential. It not only covers scientific or technical material, but the large bulk of business information considered private.

The basic ground asserted for the protection of trade secrets by the courts is of the essence of positive competition. A major distinctive feature that pervades and is characteristic of positive competition is a regard for fair competition. The governance of trade-secret relations is based on the sanctity of confidential relations and their protection against the fraudulent abuse of trust. Trade secrets are a species of proprietary information historically left to the common law of unfair competition for protection, and the law of unfair competition, based on the general principles of fairness and equity, is especially pertinent to positive competition.

In a questionnaire survey that the Institute has made, all the companies responding had some security arrangements in force. The tremendous increase in trade secrets and in transactions involving them is in large part due to the rapid gains made in R&D activity. In a recent series of personal interviews I have conducted, several research

executives of sizable companies reported this to be the case. Let me cite a few specific examples: A petro-chemical executive stressed that technology is becoming more complicated and the company is getting into more items and expanding the old ones. A chemical company executive stated that the company is moving into new areas and can not cover everything by patents. An executive in a conglomerate corporation responded that, due to the company's entrance into new fields, such as electrostatic copying and the chemical formulations involved therewith, its reliance on trade secrets had increased. Greater confidence in the courts was also encountered as a reason for the increasing reliance on trade secrets. Courts tend to balance the rights of employees to acquire highly technical knowledge against the need of companies to protect vital information.

Contrary opinion was also expressed. For example, an executive of a medium-sized conglomerate firm thought it was difficult to keep trade secrets because of the movement of personnel and that the company was recognizing that the patent system would provide sufficient protection. Although public sentiment prefers disclosure over the maintenance of secrecy as the surer road to technological progress, there are factors favoring reliance on trade secrets: they may be essential in certain employer-employee arrangements, know-how licensing transactions, protection for unpatentable technical information, and encouragement of investment. To the extent that trade secrets satisfy the requirements of our ten standards they are avenues of positive competition.

The proliferation of trade secrets due to the expansion of R&D activity, the growth of firms and industries, and the mobility of managerial and technical employees have been largely responsible for trade-secret problems and the recent publicity given them. When I interviewed research executives I asked: "Have you had any recent losses of trade secrets, and have you sought to prosecute any former personnel for illegal disclosure?" The answers to the first part of the question were generally negative. The answers to the second part of the question were more often "yes," but were related to cases that occurred some years ago. The replies to this question impressed me with the emphasis that companies place upon informal agreements and the settling of cases out of court. Private arrangements, thus, seem to be much more important than the active intervention of the courts. Advance company-employee arrangements and the alertness of firms in settling disagreements could doubtless contribute significantly to the inhibition of litigation and to the promotion of positive competition.

International Role

Know-how (including trade-secret) and patent licensing to foreign nations, both underdeveloped and developed, has increasingly flourished since the end of World War II. These licenses have afforded striking opportunities for nations to share in the progress offered by modern technology. In so doing, they make the benefits of positive competition worldwide. Although the transistor art originated in the United States, our exports of radios (including transistor types) on the world market amounted to approximately $10 million in 1966 as compared to our imports of about $94 million in transistor radios from Japan that same year. A United Nations report issued in 1964, based on a questionnaire sent to over 50 countries and a number of interested organizations, concluded that the grant of patents to foreigners in the underdeveloped countries is a factor for the correction of the imbalance of capital and technological skills between the developed and the underdeveloped countries. A pioneer study of foreign licensing conducted by the Institute found that the principal asset often wanted by a foreign company was know-how, sometimes by itself, sometimes to supplement a patent or trademark license. Foreign applications are not filed for the majority of U.S.-originated patented inventions, but there is nevertheless a substantial amount of filing abroad, and it is increasing rapidly.

Historically, European nations have taken a more tolerant view of the type of business behavior condemned under our antitrust laws, and the citizens of these countries have been able to enter with less inhibition than United States businessmen into foreign commerce. Our need to re-examine the mode of doing business abroad is underscored by the continuing adverse balance of payments and the steady drain on our gold reserves. The Europeans' deliberate pursuit of purpose in international dealings, their newly equipped technologically advanced production facilities, and the establishment of the European Economic Community, intensify the danger of our economic position. The foregoing suggests the need for changes in our antitrust policy, particularly as it relates to industrial property. This change should provide a clear and consistent statement of national purpose that might appropriately be pursued in the realm of international transactions in conformity with standards of positive competition.

The strong commitment of countries, both developed and underdeveloped, to rapid industrialization, and the local political and social institutions that obstruct growth, provide unusual constructive opportunities for extending the industrial property system. The knowledge

fostered by this system has been made increasingly important as a source of economic value by the growth of R&D activity since World War II, the needs for new products by defense-oriented companies, and drives within the country for new product lines and internationality for exports. Under such circumstances, patents and trade secrets assume new significance as technological resources. Both have become increasingly important in the economic and social advance of private and public interests of the United States. They are likewise important in other countries and in world trade. Thus, decreasing commerce in simpler items can more than be made up by increasing exchange of more technically advanced goods. National patent systems do not only protect and encourage new technology transfer across borders, they also provide incentive and protection for the contributions of domestic inventors. In short, the international role of positive competition is rich in its potentials.

Even more dramatic is the potential benefit of industrial property to world peace. Patents induce investment in, and transfer of, technology to less developed nations; and these nations, by means of such economic development, achieve greater tangible wealth and amenities of life. It is hoped that as the material standard of living rises nations will become less inclined to engage in riskful military adventure. Patent systems can provide an additional benefit. Less developed countries are inclined to disregard the law and its orderly procedures in their haste to improve their standard of living and in their impatience with time-consuming legal processes which they associate with the rule of their former colonial administrators. Patent laws drafted to serve the economic and technological needs of less developed countries should provide assistance to the legal development of those countries and foster respect and understanding for law and order. World peace would thereby be enhanced. Thus the standards we have presented this evening represent a practical means to a better world. This achievement would be the most eloquent evidence of industrial property as an instrument of positive competition.

Taxation of Foreign Licensors in Italy

PETER C. ALEGI*

SUMMARY

IN THE POSTWAR PERIOD industrialization has proceeded at an ever accelerating pace in Italy. In a nation which devotes less than seven-tenths of 1 percent of its gross national product to research and development,[1] extensive reliance has necessarily been placed upon foreign technology obtained through licenses of industrial property rights. Belatedly recognizing the importance of increased autonomy in this area for an industrial economy, the government's new five-year plan calls for a quadrupling of Italy's research and development expenditures.

* The author is an attorney with the firm of Baker and McKenzie, Milan, Italy. He is a member of the Bars of Illinois, Connecticut, and Rhode Island.

[1] Silvestri, "L'Organizzazione della Ricerca in Italia," *Mondo Economico,* (July 1, 1967), pp. 31 et seq. In absolute terms, the R&D expenditure is believed to be less than the sum paid annually for foreign technology.

EDITOR'S NOTE: This article is the fourth report of a series of studies being conducted by John F. Creed, a member of the Research Staff

The significance of the license fee outflow as a tax revenue loss was appreciated by the Ministry of Finance a decade ago, when special treatment was first given to license payments. The purpose of this paper is to outline briefly the treatment of license revenues both under generally applicable Italian tax law and the various conventions for the avoidance of double taxation entered into by the Republic of Italy.

INTRODUCTION

LICENSE FEES PAID to non-residents by Italian payors are subject to:

(1) income taxation and special levies imposed by the Italian national government;

---

of The PTC Research Institute, dealing with the taxation of the foreign licensor in certain selected non-U.S. jurisdictions. The series naturally breaks down into three study groupings:

1. Australia, Canada, United Kingdom and India.

2. The Common Market countries.

3. Japan.

At a later time other non-U.S. jurisdictions will be included in the series.

While the studies are involved principally with income taxation, other taxes are also covered where they have a material impact on the foreign licensor. Particular attention is paid to the taxation of U.S. licensors in the various jurisdictions, and in this connection an analysis of the pertinent U.S. double taxation treaties come into play.

The studies are being undertaken by men who, through training and experience, are tax experts in the respective jurisdictions. In presenting their studies, they strive to walk the path between undue technicality and over-simplification.

The first report in the series "Taxation of the Foreign Licensor in Australia" prepared by John K. Connor was published in the Volume 8, Number 1 (Spring 1964) issue of IDEA.

The second report i nthe series "Taxation of the Foreign Licensor in Canada" prepared by Hubert J. Stitt and John A. Gamble was published in the Volume 8, Number 2 (Summer 1964) issue of IDEA...

The third report in the series "Taxation of the Foreign Licensor in the United Kingdom" prepared by Malcolm J. F. Palmer was published in the Volume 9, Number 3 (Fall 1965) issue of IDEA.

(2) provincial and local assessments;
(3) national turnover tax (I.G.E.).

Collection of the first two types of taxes is through withholding which normally is treated as the definitive tax. The turnover tax is a flat 4 percent levy on the gross payment to the licensor which presents no problems and will not be discussed further.[2]

The principal Italian national tax imposed on license revenues is the Movable Wealth Tax (*Imposta di Ricchezza Mobile*) provided for in the Unified Code of Direct Taxation.[3] (T.U.)

Broadly, the Movable Wealth Tax is applicable to all income other than that from buildings, real estate, and agricultural lands. Income subject to its provisions is divided into "categories" as follows:[4]

A: income produced by capital;
B: income produced by a combination of capital and work;
C/1: income from professional and artistic endeavors;
C/2: income from subordinate employment.

License revenues received by corporations are classified in Category B, the category ordinarily applicable to commercial and industrial operation. Revenues received by non-resident physical persons fall into Category C/1.[5]

Requisites of Taxability

Subjection of revenues to Italian Movable Wealth Tax in Category B depends upon the coexistence of three conditions:

(1) use of a combination of capital and labor[6]
(2) to produce net income (*reddito netto*)[7]
(3) within the Italian State.[8]

---

[2] Italy is obligated under EEC plans to shift its turnover tax from the present "cascade" system to a "value-added" basis by January 1, 1970. It is expected that the rate will considerably exceed 4%. Since the incidence of this tax may be contractually allocated, foreign licensors would be well advised to guard against a large potential reduction in their net receipts.

[3] The Unified Code of Direct Taxation (Testo Unico delle Imposte Dirette hereinafter T.U.) was promulgated by Presidential Decree No. 645 of January 29, 1958.

[4] T.U., Article 85.

[5] The individual inventor's special tax situation, e.g., personal deductions, will not be considered herein. Apart from mention of the special withholding rates involved for physical persons, discussion will be limited to commercial legal persons.

[6] T.U., Article 85.

[7] T.U., Article 81.

[8] T.U., Articles 6 and 82.

Capital and Labor

Corporate revenues from industrial property have long been held to be produced by a combination of intellectual *labor* and *capital*, both being required to reduce to practice any licensed procedure.[9]

Net Income

Unlike the tax on Category A income which is applied without any deduction being allowed, Category B taxable or net income is determined by computing the difference between gross income falling within the category's definition and the amount of expenses connected with the production of such income.[10] Thus, a company fully subject to Italian corporate taxation simply includes its income relating to industrial property rights in the Category B portion of its return, along with the appropriate deductions.

Produced in Italy (Territoriality)

A basic principle of Italian taxation is that of territoriality, i.e., income is taxable only when produced or, in certain cases, enjoyed or disposed of within the Italian State. This principle dates back to the 1877 tax code, and is found today in Article 6 of the T.U.:

> Taxes are applicable if their presuppositions (bases) arise within the territory of the State.[11]

Article 82 of the T.U. appears to expand this principle:

> (The following) shall be considered produced within the territory of the State:
> (a) incomes due from taxpayers either domiciled or resident within the State. . .

As will appear, the applicability of the principle of territoriality to licensing revenues is the most disputed question on the subject.

Special Treatment of Foreign Licensors

Prior to the promulgation of the T.U. in 1958, foreign recipients of Italian-source license revenues were frequently not taxed in Italy. This was the result of both a doctrinal difficulty and the practical problem of collection from non-residents in the absence of a system of withholding.

---

[9] See Uckmar, *La Tassazione degli Stranieri in Italia* (1955), p. 170.
[10] T.U., Article 89.
[11] All translations herein are the writer's.

To close this hole, Article 128 was inserted in the T.U. It provides in pertinent part as follows:

> . . . Whoever in any way pays to foreigners or to Italians resident abroad, for literary rights, or royalties or fees for the transfer or license of the right to use patents, designs, processes, formulae, trademarks and the like, or compensation for the exercise in Italy of an art or profession, is required to withhold upon two-thirds of the sum paid as a provisional payment of the taxes due by the recipient:
>
> (a) the amount of 18 percent when payment is made to commercial companies taxable in Category B for copyright fees or royalties or fees for the transfer or license of the right to use patents, designs, processes, formulae, trademarks and the like;
>
> (b) the amount of 8 percent when a payment is made to other taxable subjects for items indicated in the preceding subparagraph (a), or as compensation for the exercise of arts or professions . . .

To the tax rates under Article 128 must be added certain other minor levies as mentioned previously. The rate structure may be summarized as follows:

Corporate Licensor:

Movable Wealth Tax	(RM)	18.0 %
Communal Tax	(ICAP)	3.0
Provincial Tax	(AP)	1.5
Welfare Assistance	(ECA)	2.25
Flood Relief Tax	(AA)	2.25
		27.00%

The foregoing are applied, it will be recalled, to only two-thirds of the gross license fee. The effective rate of income tax withholding is therefore 18 percent, plus a 4 percent turnover tax.

Individual Licensor:[12]

	(a)	*(b)*
Movable Wealth Tax	8.0 %	18.0 %
Communal Tax	2.4	3.0
Provincial Tax	1.2	1.5
Personal Complimentary Tax	4.0	4.0
Welfare Assistance	1.56	2.65
Flood Relief Tax	1.56	2.65
	18.72%	31.80%

[12] The rates specified in column (a) are for a professional inventor; those in column (b) apply to an individual "exercising a commercial or industrial activity."

The effective rates after the one-third reduction are 12.38 percent and 21.20 percent respectively, plus turnover tax.

By its own terms Article 128 provides merely for a provisional withholding or down-payment of taxes ultimately to be determined after filing by the foreign recipient of an Italian tax return. A return would allocate between Italy and other taxing jurisdictions the expenses incurred in developing the licensed technology, claiming these and other appropriate deductions from Italian gross income. The only difficulty would be the inability of the Italian tax authorities to make a proper examination of the return filed by the foreign recipient. The Ministry of Finance and the commentators agreed upon the practial impossibility of ascertaining the legitimacy of the costs incurred abroad in connection with the license income.

Therefore, the legislative draftsmen deliberately discouraged filing of returns by basing taxation of license revenues upon two-thirds of the sum transmitted abroad. In this fashion they guaranteed deductibility of costs equal to one-third of the gross Italian revenue as an inducement to the foreign recipient *not* to file and claim a refund. In the rare instances where a return is filed, expenses claimed may be, we are informed, arbitrarily disallowed, resulting in an assessment larger than the withholding liability because of the denial of the automatic one-third deduction. Moreover, the 18 percent rate specified in Article 128 is the minimum corporate rate, applicable on net incomes not exceeding Lit. *(sic)* 4,000,000.[13] Were a large licensor to file a return, even allowance of the one-third deduction would result in increased tax liability because of the shift into the higher brackets.

Nevertheless, a legal obligation to file a return does exist, and penalties are provided for failure so to do.[14] It appears that certain foreign companies receiving large license revenues which had been assessed on declarations filed prior to the adoption of a withholding system are still subjected to the full tax, being credited with the amount withheld. Apart from these few cases, the practice tolerated by the authorities permits the payee of license fees to omit filing an Italian return.

One must note that certain foreign recipients, accustomed to a more stringent tax system, have difficulty in accepting the fact that Italian tax law *requires* them to file a return while *discouraging* them from so doing.[15]

---

[13] T.U., Article 90.

[14] T.U., Article 17, pp. 243 et seq.

[15] The period of limitation for assessment against a taxpayer failing to file expires on December 31 of the third year following the year in which the return should have been filed; T.U., Article 32, as amended by Law No. 958, October 31, 1966.

The Territoriality Problem

The territoriality principle of Article 6 [16] envisages a narrower geographic range of taxation than prevails in the United States. A clear Italian nexus is required before economic acts may be taxed in Italy. For example, profits of overseas branches of Italian companies are not subject to taxation in Italy prior to repatriation. The rule is that income may be taxed only if produced or enjoyed in Italy. Realization in Italy is not a sufficient basis to permit taxation.[17]

The application of this principle to license revenues has long troubled tax commentators, especially since the Italian courts and tax administration have uniformly held such revenues taxable in whichever direction they flow. The Ministry of Finance has ruled that an Italian enterprise must declare in Category B its receipts from licenses granted to foreigners for use of industrial property rights outside of Italy (see Min. Fin. Res. n. 351830, October 28, 1957). The core of the theoretical argument for exempting license revenues flowing out of Italy from Italian taxation is as follows:

> Either the foreign company has a permanent establishment in Italy and is subject therefore to Movable Wealth Tax on income from commercial activities in Italy (Article 82c of the T.U.); or it does not have a permanent establishment in Italy, but sends here from abroad the product of its industry and knowledge and receives a simple consideration therefor, like all those who send into Italy any tangible or intangible goods.[18]

The argument for non-taxability of the foreign licensor is supported by all the academic writers on the point, generally espousing the "either/or" concept of "production of income" spelled out above.[19]

This argument has yet to receive any judicial support. The tax commissions and reviewing courts have uniformly affirmed the taxability of license revenues flowing from Italy, although they have not yet found a satisfactory explanation. Most recently, the Supreme Court of Cassation, in the celebrated *Nestlé* decision,[20] confirmed a tax commission holding that license fees and royalties received by *Nestlé* were fully taxable in Italy.

---

[16] Refer to p. 646 of this paper.

[17] See Uckmar, *La Tassazione degli Stranieri in Italia* (1959 Supp.), p. 13, n. 16, collecting authorities.

[18] Moroni, "L'imposta sui redditi di R.M.," *Il Sole—24 Ore* (March 3, 1967).

[19] The relevant materials are collected in a recent monograph, Capaccioli, *La Tassazione delle Redevances* (1967); see also Uckmar, *op. cit. supra* note 9; Berliri, Nota, 39 *Giurisprudenza delle Imposte* 1 (1966); Crocetta, "Sulla tassazione delle Redevances," 36 *Diritto e Pratica Tributaria II*, p. 21 (1965).

[20] Société des Produits Nestlé v. Finance, No. 1750 (July 24, 1965), reported in 39 *Giurisprudenza delle Imposte* 1 (1966).

The Court relied exclusively upon Article 82 (a).[21] It stated that under this article the *realization* of gross income in Italy is sufficient basis for the application of taxes on income *produced* in Italy. The Court's *ipse dixit* overlooks several key points. First, the word *reddito* (income) has a technical significance of net income consistently throughout the T.U. Therefore, its use in Article 82 (a) has traditionally been viewed as applying only to Category A income from use of capital, where no deductions are allowed and all receipts are taxable *reddito*.[22] If this article is applied to licensing income of Category B (or C/1 for individual inventors), no deductions will be permitted since the law by its express terms "considers" the gross payment made to a foreigner as taxable income. Furthermore, if Article 82 (a) is to be applied broadly to all receipts from Italian sources, what treatment is to be accorded foreign sellers of merchandise? Their profit has never been subject to Italian taxation.

In short, the Court's thesis proves too much, and it is to be expected that other panels of Supreme Court judges will seek other grounds in view of the rash of criticism provoked by the rationale of *Nestlé*—regardless of the result reached.

To this observer it seems that while the Court has erred in calling upon Article 82 (a), industrial property rights are not susceptible of the ready localization suggested by the critics of the Court who hold Article 128 to violate the territoriality principle. It would seem that the protection given to the licensor by the licensee's legislation and court system is a sine qua non of the production of income. In other words, the creative moment—occurring in the licensor's home jurisdiction—is not the final step in the temporal sequence of income production, which must include reduction to practice and protection of the licensor in the licensee's jurisdiction. One may say that current commentary tends to conceive of the production of income in a highly conceptualistic or static fashion: either XYZ Inc. produced the income abroad, or ABC S.p.A. produced it in Italy. The joint contributions of licensor, licensee and protective laws cannot, in my view, be separated in the production of this type of income.[23] On this analysis taxation would be possible in more than one jurisdiction, and allocation of costs and income would be necessary. This possibility of sound claims of the right to tax such income in different jurisdictions has led to the

---

[21] Refer to p. 646 of this paper.

[22] See, e.g., Berliri, *supra* note 19.

[23] Cf. Bittker & Ebb, *Taxation of Foreign Income* (Prelim. Ed. 1960), pp. 148-158.

inclusion in most international tax conventions of a flat rule covering licensing revenues.[24]

Some Practical Aspects of Article 128

Sales

It has long been the rule in Italy that—absent a permanent establishment—a foreign firm is not subject to taxation in Italy for goods sold to Italians.[25] With respect to sales of industrial property rights, Article 128 provides for withholding from "royalties or fees for the *transfer* or license of the right to use" industrial property. The language suggests that sale of industrial property rights to Italians is subject to taxation, and the *Nestlé* decision certainly would tend to support such a holding.

However, Article 128 does not create an independent tax, and sales of industrial property rights prior to its adoption were not considered taxable. The only authority in point since the adoption of the law[26] which has become T.U. Article 128, is Finance Ministry Note No. 300655 of June 17, 1957. The Ministry's opinion was requested concerning the applicability of Article 128 to the transfer of certain designs and plans from a foreign firm to an Italian firm. These designs related to (1) repair and maintenance of machinery sold contemporaneously; (2) machinery to be acquired to complete installation of the machinery sold contemporaneously; (3) other machinery to be purchased independently.

The Ministry's reply on the first two points was unequivocal: the designs were included in the machinery sale, were necessary thereto, and were included in its price. Therefore, they were not within the ambit of Article 128.

On the third point, which was outright transfer of intellectual property embodied in designs, the Ministry held the transaction exempt, pointing out that Article 128

---

[24] Curiously, some commentators assert that the tax treaty exemption of license income from taxation in the payor jurisdiction is a confirmation of their belief that only the payee nation has the right to tax under general principles. See, e.g., Crocetta *supra* note 19, p. 32.

[25] See Uckmar, *op. cit. supra* note 9, p. 175.

[26] Article 18, Law No. 1 of January 5, 1956.

> . . . does not speak of a purchase price, but rather of fees or royalties, presupposing the existence of a relationship between the transfer or grant of rights and the exploitation in Italy of such rights . . .
>
> It is believed that no withholding need be made in the cases submitted, provided that the purchase of the various types of designs occurs through a purchase and sale contract which calls for their transfer against payment of a price commensurate with the value of such designs, excluding, therefore, for the foreign companies, any and all claims connected with the use of or failure to use the rights transferred to or granted to the Italian companies.

By thus interpreting Article 128 as applicable only to payments made to foreigners in connection with their retention of a continuing interest in the use of industrial property rights in Italy, the Finance Ministry has for all practical purposes immunized lump-sum sales of patents, trademarks, and other industrial property rights, inasmuch as foreign firms will receive their payments free of any withholding, and can be expected not to file an Italian tax return. It is possible that the broad language of the *Nestlé* decision may at some future date lead the Italian tax authorities to assert tax claims against a foreign seller of industrial property rights, since Note No. 300655 by its express terms applies only to the question of whether there is an obligation to effect withholding.

In view of the foregoing, a non-Italian wishing to make an absolute transfer of industrial property rights to an Italian taxpayer will be well-advised to avoid stating any part of the consideration in relation to use made of the rights in Italy, e.g., expressing the sales price as a lump-sum plus a percentage of volume. Keeping in mind the territoriality principle, it would appear prudent to conclude such contracts, whenever possible, outside of Italy.

Know-How and Technical Assistance

The English term "know-how" has been adopted in Italy as a convenient reference to confidential and secret data relating to machines, processes, designs, and inventions which in some way are embodied in more than the skill and experience of specialized personnel. "Technical assistance" involves more directly the "personal service" aspect of technological transfer. Neither of these terms has the quality of a term of art in Italian tax law. Significantly different tax results can be obtained by draftsmanship which observes several basic rules.

First, agreements for the sale of know-how, whenever possible, should be keyed to the transfer of physical property (prints, manuals,

et cetera) for a lump-sum consideration. This will maximize the likelihood of the transaction being considered a tax-exempt sale in accordance with the previous discussion herein.

Second, to the extent possible, technical services rendered should be separately identified as to place of performance. Services rendered outside of Italy will not be subject to the turnover tax.

With respect to both types of agreement, care should be taken not to express the consideration as a percentage of turnover or in any other fashion which resembles the usual method of fixing royalty payments. The Italian tax authorities usually assume that any agreement involving percentage payments—however it may be labelled—is a disguised royalty payment subject to withholding under Article 128.

Tax "Pass-On"

Licensing agreements frequently contain a clause requiring the licensee to pay all taxes arising in the licensee's jurisdiction. Shortly after Italy instituted a withholding system on license payments, the Finance Ministry was asked to rule upon the applicability of the withholding law to agreements providing for passing of all taxes to the Italian licensee. The Ministry ruled that such clauses could not relieve the payor of its duty under the law to effect a withholding from the agreed fee.[27]

Several years later a ruling was asked on a clause which had the identical purpose of guaranteeing the licensor a specific net sum. However, in this case the contract draftsman had provided an escalation clause under which the American licensor's fees would increase or decrease in accordance with variations in Italian taxation. This form of tax "pass-on" was held valid since it did not in any way interfere with the obligation of the Italian licensor to effect a withholding, but rather varied the basic sum against which the withholding would operate.[28]

Impact Of Tax Treaties

Many of Italy's tax treaties contain provisions expressly or impliedly exempting licensing income from the basic national tax (*ricchezza mobile*) provided that the foreign recipient does not have a perma-

[27] Ministerial Circular No. 301070, March 26, 1957.
[28] Note No. 351199, May 5, 1959.

nent establishment in Italy. Certain treaties also exempt the foreign licensor from the national tax surcharges and the local levies. The more important treaty provisions are summarized briefly heareafter:

(1) *United States:* Article VIII of the treaty exempts royalties and other amounts received as consideration for the right to use copyrights, patents, designs, secret processes and formulas, trademarks and other like property. However, the definition of "taxes" in Article I does not include the national "additionals," local taxes, surcharges, or turnover tax. Therefore, the following taxes are applicable:

(a) Licensor: Corporation or individual in commercial activity:

Communal Tax	3.0%
Provincial Tax	1.5
Welfare Assistance	0.45
Flood Relief Tax	0.45
	5.40%

Applied to two-thirds of the remittance, the effective rate is 3.6 percent plus the 4 percent turnover tax.

(b) Licensor: Individual (professional inventor):

Communal Tax	2.40%
Provincial Tax	1.20
Welfare Assistance	0.36
Flood Relief Tax	0.36
	4.32%

Applied to two-thirds of the remittance, the effective rate is 2.88 percent plus the 4 percent turnover tax.

(2) *United Kingdom:* Article IX is similar to the provision described above, and the rates applicable are identical. Further, Article IX (5) expressly exempts the proceeds of sale of industrial property rights from taxation in the buyer's jurisdiction.

(3) *Germany:* Under Article 3 of the German treaty (also applicable to Austria[29]) all Italian-source revenues not produced by a permanent establishment are exempt from all income taxes. Turnover tax is applicable.

[29] By virtue of an exchange of notes of August 26, 1950.

(4) *France:* Article VI of the treaty is virtually identical to the Italo-German treaty.

(5) *Holland:* Under Article IX of the treaty, only the turnover tax is assessed.

The government has recently announced plans for an extensive tax reform. By 1970 it is expected that some 20 separate taxes will be combined into a single levy. As of this writing, no draft has been made public. It seems likely however, that the new tax will absorb the various minor taxes which are not exempt under the U.S. and U.K. treaties cited above. In effect, this would produce a broadening of the exemption, as the new "supertax" will probably be a fully exempt tax under these treaties.

Conclusion

Italian tax law relating to licensing of industrial property is still in its embryonic stage. The chief feature, the withholding system, has just begun to be tested in the courts. The operation of tax treaties concluded with the principal industrial nations and the availability of a tax credit in some of these nations blunts the thrust of Italian taxation for the foreign licensor and make it unlikely that there will be any rapid development of decisional law in this area.

The rigid manner in which the withholding law is applied makes it important for the foreign licensor to observe the few simple rules outlined herein to minimize his Italian tax exposure.

Use Limitations in Patent Licenses

JOSEPH GRAY JACKSON and EDWARD LOVETT JACKSON*

SUMMARY

RECOGNIZING THAT PATENT LICENSES containing use limitations may increasingly present problems of antitrust violation or misuse, an analysis is made of factors which may tend to support use limitations in particular cases, such as exclusivity, scope and statutory class.

IN HIS OUTSTANDING FLOYD CREWS MEMORIAL LECTURE, presented at New York University Law School November 30, 1967 Mr. Justice Tom Clark discussed the relation of the antitrust law to patent law in the context of its history, its present interpretation, and the probable

* The authors are partners in the firm of Jackson, Jackson and Chovanes, Philadelphia.

future development.[1] In discussing price fixing, Justice Clark explained the equivocal position of *U.S.* v. *General Electric*[2] as a precedent, in view of the fact that it has twice been saved by an equally divided court. Justice Clark pointed out that there is grave doubt whether the doctrine of the *General Electric* case on price fixing of patented articles will survive another direct attack.

In discussing limitations on the field of use in patent licenses, Justice Clark indicated that this depends on another landmark case, *General Talking Pictures* v. *Western Electric*,[3] which held not only that a limitation to field of use is effective against the licensee, but that it also operates against a knowing purchaser from the restricted licensee. The Pictures Corporation had purchased a patented sound amplifier from American Transformer Company, which had been granted by Western Electric a nonexclusive license in the private field including radio broadcast reception, but the Pictures Corporation was using the amplifier in the commercial field. The Pictures Corporation knew of the limitation, and was held to infringe the patent. As Justice Clark made clear, the doctrine of the *General Talking Pictures* case seems to be anomalous because it restricts the use of a patented article after title has passed from the original licensee.

Justice Clark pointed out that Assistant Attorney General Turner does not agree with the *General Talking Pictures* case and that there is a likelihood of more litigation in this area. He raised the question as to whether, if the use restriction were imposed only on the licensee, and did not extend to purchasers from the licensee, a license would be likely to survive a new attack in the Supreme Court.

In discussing the subject, Justice Clark mentioned two very recent lower court decisions. In *Hensley* v. *Esco*,[4] conical excavating teeth on a power shovel were required by the license to be replaced by licensed products when they wore out. The Court of Appeals held that this was a misuse, and no petition for *certiorari* was filed. In *Armstrong* v. *Motorola*[5] the license authorized Motorola to buy or manufacture and resell radio and TV products. The license restricted customers to

---

[1] Clark, Tom, Floyd Crews Memorial Lecture, *New York University Law Review*, Vol. 43 (March 1968), p. 88.

[2] 272 U.S. 476 (1926). In U.S. v. Line Material, 333 U.S. 287 (1948) there was a 4-4 split. In U.S. v. Huck, 382 U.S. 197 (1965) there also was a 4-4 split but this might have been influenced by the fact that the Justice Department changed its mind in the Supreme Court.

[3] 305 U.S. 124 (1938).

[4] 383 F. 2d 252, 155 *USPQ* 183 (5th Cir. 1967).

[5] 374 F. 2d 764, 152 *USPQ* 535 (7th Cir. 1967); — U.S. —, 19 L. ed. 2nd 88; — U.S. —, 19L. ed. 2nd 500 (1967).

whom the products could be sold and limited the use to taverns, restaurants, ships, airlines, etc. The Court of Appeals approved the restrictions and held that there was no misuse, and the Supreme Court denied both a petition for *certiorari* and a petition for rehearing.

A new voice has been heard on use limitations in patent licenses. *The Report of the President's Commission on the Patent System* urges that the matter be clarified in Recommendation XXII as follows:

> The licensable nature of the rights granted by a patent should be clarified by specifically stating in the patent statute that: (1) applications for patents, patents, or any interests therein may be licensed in the whole, or in any specified part, of the field of use to which the subject matter of the claims of the patent are directly applicable, and (2) a patent owner shall not be deemed guilty of patent misuse merely because he agreed to a contractual provision or imposed a condition on a licensee, which has (a) a direct relation to the disclosure and claims of the patent, and (b) the performance of which is reasonable under the circumstances to secure to the patent owner the full benefit of his invention and patent grant. This recommendation is intended to make clear that the "rule of reason" shall constitute the guideline for determining patent misuse.

While this has been left out of the Administration Bill to Amend the Patent Law, S. 1042, it is included in the ABA bill, Dirksen S. 2597.

Many company officials and patent lawyers are now wondering whether it is safe to employ use limitations in patent license agreements, and what are likely to be the consequences. While use limitations are not subject to the uncertainty of price fixing insofar as permitted by the *General Electric* case, there is a certain analogy. Each depends upon a holding in a landmark Supreme Court case, in one instance the *General Electric* case and in another instance the *General Talking Pictures* case, and each of these landmark cases is now under attack by the Department of Justice.

The subject of possible antitrust violation is so important to a manufacturer who may be subjected to treble damage suits, that many companies would suffer less loss from a fire which destroyed a whole plant, than from violation of the antitrust laws.

Limited licenses to sell to customers who will use the patented device solely for certain prescribed purposes were at one time uniformly upheld.[6]

---

[6] Nordhaus and Jurow, *Patent—Antitrust Law* (1961) 171. They cite General Talking Pictures, and Automatic v. Hazeltine, 339 U.S. 827 (1950) which held that a license limited to the manufacture of products to be used in home reception was valid.

In *Baldwin-Lima-Hamilton* v. *Tatnall*,[7] Baldwin, the patent owner, sold strain gauges with a notice that use and resale was limited to use for temporary expendable testing. Use in permanent set-ups like load cells was reserved to those who purchased the load cells from Baldwin. Baldwin, however, did not have patents on the load cells. The court held that the notice on the strain gauges constituted a misuse and the lower court by way of reasoning considered that it was a per se violation of the antitrust laws because there was allocation of fields of use and because the arrangement involved tying in respect to the unpatented load cells. While the case involves the tying aspect, it seems that the lower court was prepared to hold that the limitation after sale of the product to temporary expendable use in testing constituted a per se antitrust violation.

Cutter Laboratories v. *Lyophile Cryochem*[8] involved freeze drying of drugs. Sharp and Dohme owned a series of patents relating to processes, products, containers and machinery and F. J. Stokes owned a similar series of patents. These two companies formed Lyophile Cryochem to which they transferred the exclusive power to use-license under all these patents in the freeze dried drug field. Lyophile granted a nonexclusive royalty-free license to Sharp and Dohme to make, use and sell medical products covered by the patents and to use patented machinery and to manufacture machinery. Stokes was given an exclusive license, subject to Sharp and Dohme's rights, to manufacture and sell patented machinery. The court held that the licenses did not constitute misuse on the ground that anybody interested was able to obtain a license without any restriction as to pricing, or as to use or sale of patented articles. The court looked at the fact that Sharp and Dohme and F. J. Stokes were not in competition.

An Antitrust Problem

We have here a conflict between the patent law and the antitrust law, if each were to be taken to its ultimate extent without regard to the other. Even though use limitations in patent licenses arise under the patent law, it would seem unrealistic to expect that in all circumstances they have been validated by the patent law to such an extent that the antitrust problem can be wholly ignored. Recognizing that in an important area the patent law should by rights provide a

[7] 169 F. Supp. 1, 120 *USPQ* 34 (E.D. Pa. 1958); 268 F. 2d 395, 121 *USPQ* 363 (3rd. Cir. 1959); 268 F. 2d 395, 122 *USPQ* 357 (3rd Cir. 1957).

[8] 179 F. 2d 80, 84 *USPQ* 54 (9th Cir. 1949).

basis for use limitations on the reasoning that all that is occurring in those cases is the subdivision of a perfectly valid legal right, we still should recognize that we always have to consider the legitimate scope of the antitrust laws in this general connection.

Use limitations therefore relate to the law of antitrust and particular cases will be decided partly on the basis of the court's view of the overall antitrust situation in each case. Therefore, one of the important aspects is whether the use limitation tends to make it possible to extend utilization of the product, in which case the court will be more favorable, or whether it tends to restrict activity, in which case the court will be less favorable. If the use limitation is neutral from the antitrust standpoint, but aids the inventor in obtaining his reward, the attitude of the court is likely to be mildly favorable.

Therefore, one should know the complete background of the case from an antitrust standpoint in order to evaluate the use limitation. Almost any use limitation (or in fact any other limitation) in a patent license might in a particular case be bad if the particular licensor or licensee is outstandingly dominant in a particular industry and the use limitation in itself has the effect of substantially increasing this dominance. In such case, the court may for example, under a particular set of circumstances, consider that a use limitation really represents an allocation of fields of activity among companies which in the absence of the limitation would be likely to be competing in one or both of the fields of activity, and if so, for that reason alone, it may be considered to violate the antitrust laws.

One of the questions which should be explored in every case is the context of the patent being licensed and the portfolio of patents held by the licensor and by the licensee in the particular field. It would seem that a use limitation is less likely to be upheld if it is applied to a very important patent than if it applies to a less important patent. Also, it would seem that a use limitation is less likely to be valid if it is surrounded by a portfolio of very important patents in the field held by the licensor or by the licensee.

Justice Clark[9] pointed out that antitrust exposure may be increased by including more than one patent in a license agreement. Thus, if the license containing the use limitation covers more than one patent there may be more difficulty than if it involves only a single patent. If the license covers many patents, this may in itself be a reason for objecting to the use limitation.[10]

---

[9] *Supra* note 1.

[10] But see Automatic v. Hazeltine, *supra* note 6, which licensed under hundreds of patents.

The principle of multiple exposure is likely to impair the prospect of validity of a use limitation if the license also includes any other restriction, such as a territorial limitation, quantity limitation, or a grantback clause.[11]

The acquisition aspect or analogy in the case of a use limitation should be considered. It will be necessary to know the field in which the licensor is active and would be expected in the future to be active and the field in which the licensee is active and would be expected in the future to be active. If there is no overlap in these present and prospective fields of the licensor and the licensee, it would seem that this acquisition aspect will not be an impediment to the validity of a use limitation but if there is an overlap, this may be an obstacle.

If a use limitation purports to bind someone who has purchased or leased a patented article from the licensee, and not merely to bind the licensee itself, there is likely to be greater danger of invalidity.[12]

There is an antitrust theory that any patent license restriction which is not imposed for the sole purpose of securing to the patent owner his reward under the patent is likely to be invalid under the antitrust laws.[13] Thus, a restriction which only benefits the licensee or is demanded by the licensee may be suspect under this theory. However, we all have contact with the practical problems of licensing, and must realize that reasonable concessions to please the licensee must often be made or there could be no license agreements executed. Thus, if all that is happening, for example, is that the licensee does not want to be granted as much because he does not want to pay as much, and there is no other affirmative special antitrust implication, it is hard to see what sense there would be in claiming this was bad under the above theory.

How Limitation is Imposed

Traditionally, license theory has made a point of whether the limitation was in the license, in which case it could be considered to limit the license itself, or whether it was contractual.[14] Several cases should be distinguished:

(1) If the patent owner himself is selling the product, and he is

---

[11] *Supra* note 1.

[12] *Supra* note 1.

[13] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 117.

[14] William Woodward of New York suggested that this is an important consideration in the General Talking Pictures case, where the licensee made an unlicensed sale.

trying by a limitation noted on the product or on the invoice or in the sales contract to limit a field of use, the limitation is contractual, not part of a patent license, and so may be illegal under the *Baldwin* case.[15] The courts do not consider that the transaction can be broken down into two separate aspects: (a) grant of a limited license to use, and (b) a sale.

(2) Suppose the patent owner were to grant a limited license to use the product, with the understanding that the product could be bought from anyone, including the patent owner. This is more typical of a limited license than a contractual limitation.

(3) If the patent owner grants a license to make, and sell for a limited use, insofar as this restricts the licensee it is a license restriction and should be supported.

(4) If the licensee under (3) were to sell with a notice of the limited use, this would be exactly the situation in *General Talking Pictures.* The notice might be regarded in either of two different ways:

  (a) as a notice that the product was unlicensed if used beyond the license field, or (b) as an inclusion in the sales contract of a provision that the product should not be used beyond the limited field.

(5) If the patent owner grants a license to sell to a limited class of customers designated by a commercial designation, for example to the ultimate purchaser and not to those who resell, it would seem that this might be a per se violation under *Arnold Schwinn.* But the court in that case reserved the question of the possible effect of patents.[16]

Exclusive and Nonexclusive

At first sight, an exclusive patent license, being restrictive, would seem to be subject to more critical examination as to the validity of use limitations than a nonexclusive license. But as realistic people we must put ourselves in the positions of the licensor and licensee, and when we do this, we will often find that there is more inherent justification for a use limitation in an exclusive patent license than in a nonexclusive license. Almost every exclusive license has some anti-shelving provision such as a minimum royalty. The amount of the minimum royalty is likely to depend upon the breadth of the license

[15] *Supra* note 7.
[16] *Infra* note 35.

field. No licensor would want to give an exclusive license with an inadequate minimum royalty which would encourage the licensee to ignore exploitation in certain of the licensed areas. No licensee, on the other hand, would want to be committed to such a high minimum royalty that he could not make the matter a paying proposition because he has included, within the license, fields in which he has no interest. Therefore, it is practically necessary in many cases, to both the licensor and the licensee, to pare down the license field to an area which the licensee can reasonably commercialize and where his efforts can be adequate to support the minimum royalty. The effect of forbidding this would be to deny to a potential licensee with a small field of activity, the opportunity of obtaining an exclusive license in competition with a larger potential licensee, and tend to make exclusive licenses a luxury to be enjoyed only by large concerns. Thus in this area, forbidding limitation to a particular field of use may encourage bigness in industry.

At first sight, it would seem that a use limitation would be less subject to criticism in a nonexclusive license because a nonexclusive license is less restrictive. Actually, when the matter is studied, however, there may be more question as to whether there is a real justification for a use limitation in a nonexclusive license. Of course, if a licensor is to license exclusively in one area and nonexclusively in other areas, he must have a use limitation in the nonexclusive licenses to avoid overlapping the exclusive license.

One possible justification for a use limitation in a nonexclusive license is that the invention may be more valuable in one field than in another field and that different royalties might be charged depending on the value of the contribution made by the invention.[17] Another possible justification for a use limitation in a nonexclusive license is that the licensee may not agree with the licensor as to the scope or validity of the patent. For example, the licensee may believe that a certain area of use does not infringe the patent at all, whereas the licensor feels that the patent applies to this area. Or the licensor may

[17] Although it did not involve a use limitation, the court in Peelers v. Wendt, 260 F. Supp. 193, 151 *USPQ* 378 (D.C. W.D. Wash. 1966) proved insensitive to the defense that a different royalty might be charged in an area where the invention made a greater contribution in the sense that it caused a greater cost reduction, the court being more interested in the fact that the greater royalty would also cause a competitive disadvantage. As practical men, however, we must recognize that the value of a patent and therefore the royalty which is likely to be obtainable will vary with the cost saving or other value which the invention contributes, and it would not be economically sound to ignore this aspect from the standpoint of licensing.

believe that the patent has a valid scope which would permit it to cover an area in which the licensee believes it cannot validly apply. Under this condition, if there is to be any license at all, the use limitation to the area in which the patent is believed by the licensee to be operative may be a matter of necessity.[18]

Public policy may favor a use limitation in certain nonexclusive licenses. In *Chemagro* v. *Universal*[19] an insecticide was involved. A composition of high concentration was sold with a label license limitation to use by commercial growers. The defense alleged by the patentee against a contention of misuse was that commercial growers are highly skilled in the use of insecticide and are not likely to be endangered by the toxicity of the compound when present in high concentration, whereas a home gardener might find it dangerous. The court held there was no misuse and enjoined the activity of the buyer in repackaging the insecticide for home use.

Life of Patent

There are some nice theoretical questions which arise where use limitations imposed in a license can extend beyond the life of an existing patent. Theoretically, if a license involving use limitations is under a patent application (or includes patents and a patent application) the use limitation as applied to the patent application prior to its grant cannot be supported under the patent law. This seems to involve a problem discussed by Justice Clark as to whether know-how or trade secrets are subject to the full rigors of the antitrust law, or whether they can be supported by analogy to patent licensing.[20] It would, therefore, seem that it might be wise to include a clause in a patent license agreement involving patent applications which would initiate the use restrictions as to each patent only upon actual grant.

There is also a theory that use limitations in a patent license should not extend beyond the life of existing patents.[21] Thus, if the license agreement is to include improvements to be made in the future, there may be objection on this theory for violation of the antitrust laws or misuse. One way to handle this matter might be to eliminate any use limitation as applied to improvement patents.

---

[18] Of course the license could be under the entire patent, but royalty be payable only for use in a narrower field. In practical effect, however, this is a use limitation.

[19] 244 F. Supp. 486, 146 *USPQ* 466 (D. C. E.D. Tex. 1965).

[20] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 107, 108. Justice Clark, *supra* note 1. Brulotte v. Thys, 379 U.S. 29 (1964).

[21] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 107, 108.

SCOPE AND STATUTORY CLASS

It may make a difference as to whether the claims of the patent are directed to the process, machine, manufacture or composition.

Some very difficult problems are involved when one considers use limitations under claims of different statutory classes which may or may not be in the same patent. Where a patent has apparatus, manufacture or composition claims only, and these claims apply to the product as manufactured by the licensee, the inclusion of use limitations which are to extend to the product after it is owned by a customer, although proper under *General Talking Pictures,* is much more likely to be open to attack than if the claims were process claims and the customer used the process. The court is understandably critical of attempts to restrict the use of a product after title has passed.[22]

Where a patent owner sells an unpatented apparatus, article, or composition with an invoice license or a label license under a process patent covering the use of the apparatus, article, or composition, the following problem will arise. There should be an alternate procedure by which the purchaser can buy the unpatented apparatus, article, or composition from someone else and pay the same royalty without needless complications. Otherwise, the label or invoice licensing may be violative of the antitrust law for tying. The mere fact that there would be a requirement for reporting procedure and separate payment of royalty when purchase is made from someone else would not seem to be objectionable as long as the same amount is paid by the customer and he is not unduly hampered.

If a process patent contains claims on different species and it is possible to license the entire subject matter of one species claim to one user and of another species claim to another user, there is a very strong position to support what otherwise would be use limitations. The situation in this case is analogous to licensing one patent to one company and another patent to another company. This may be a justification, therefore, for prosecuting species claims which otherwise would not be important.

It should be mentioned, of course, that in licensing a process, either by label, invoice or express license agreement, where the manufacturer sells an unpatented material, it would seem unwise to use a threat of withholding sale of his material as a means of enforcing his process

---

[22] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 12.

patent, unless the sale of the material by others would be a contributory infringement of the process patent.

If the question comes up as to whether any sort of license may be limited to a particular field of use, the position of the patentee is much stronger under a process patent which the customer will use, than when the customer will buy an apparatus, article or composition which is patented, since the court may not be happy about attempting to control the use of an apparatus, article or composition after title has passed by a sale even by the licensee.

You have less problem in issuing a license with use limitations or other such aspects if both the apparatus, article or composition claims and the process claims are in the same patent, because then no problem of package licensing is likely to arise. Where separate patents are involved, and one of the patents is for a process which is inherently limited in some way, there may be danger in the licensor's refusing to go along with the licensee as to precisely which patents shall be licensed, and this is a complication.

Where a patent involves apparatus, article or composition claims and also claims on the process of use, the strongest case might be one in which there are non-overlapping species claims or non-overlapping claims in different statutory classes which can be licensed to different parties. This is very likely to be supported.

If the apparatus, article or composition claims are in one patent and claims on the process of use are in a different patent, claims on the apparatus, article or composition may be subject to attack in respect to use limitation on the ground that they tend to restrict after title has passed and are therefore more vulnerable than the process of use claims. Both licenses, however, may be vulnerable on the ground of package licensing if the same royalty is charged, whether the license covers one patent or both, and if there is no procedure for allowing the licensee to take his own option as to whether he will obtain a license under one patent or both.

If a use limitation is to apply to an unpatented apparatus, article or composition after title has passed to the customer, the situation may be supported if the nature of the commodity sold makes it a material part of the invention, especially adapted for use in infringement and not a staple article of commerce under the Patent Law Section 271 (c). Such a case might be one in which the patent applies to an article protected by a protective coating and the composition sold is a liquid composition uniquely suited to apply the protective coating to the article.

With the modern emphasis on Jepson claims which pinpoint the

exact place of novelty, attention should be given to the importance of choosing the correct form of claim to avoid needless difficulty with misuse or antitrust violation. The courts have tended to use the claims as the measure of the patent monopoly, and thus have determined by the claims what is outside the monopoly and might contribute to misuse or antitrust violation. This was, for example, a consideration in *Baldwin* v. *Tatnall.*[23]

It is very important that the Examiner be made to recognize the misuse and antitrust problem so that he will permit flexibility to the applicant in choosing the form of his claims, and some liberality in allowing claims which may differ in form. At any rate every attorney prosecuting a patent application should have clearly in mind the possibility of a misuse or antitrust problem when he selects the form of his claims.

Every patent which is subject to licensing under a use limitation will be open to a test of validity even in litigation involving payment of royalty,[24] according to one theory.

Consequences of Reversal

If the Supreme Court were to reverse *General Talking Pictures* and hold a misuse in a patent infringement case it would seem that the patentee would suffer the full consequences. But if in an antitrust case *General Talking Pictures* were no longer to be followed, there might be special equity to have the holding act only prospectively, since a landmark case would be swept away.[25]

Related Aspects

There are certain other aspects of misuse which should also be considered in connection with use limitations. In *LaPeyre* v. *F.T.C.*[26] a cease and desist order was affirmed which forbade LaPeyre to charge a higher rental to one lessee of his shrimp peeling machinery than that charged to another. The court thought that the matter was not a question of violation of the Robinson Patman Act, but was a matter of

---

[23] *Supra* note 7.

[24] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 79.

[25] Lyons v. Westinghouse, 235 F. Supp. 526 (D.C. S.D.N.Y. 1964); Comment 113 *U. of P. Law Rev.* 1091.

[26] 366 F. 2d 117, 151 *USPQ* 79 (5th Cir. 1966).

the duty of a patent owner to avoid causing competitive injury on one class of customers.

Peelers v. *Wendt*[27] held that the Robinson Patman Act prohibits initial stage price discrimination and that Section 2 of the Sherman Act forbids charging discriminatory rates even by a single firm not involved in conspiracy. The lessor thought that the fact that the higher charge was made where there was greater saving from the invention justified the plan, but the court was impressed with the competitive disadvantage from the higher royalty.

American Photocopy v. *Rovico*[28] held that there is no tying involved in charging a 6 percent royalty on the selling price of a machine even though the invention did not relate to the entire machine.

Fixed unit royalty rates and descending unit royalty rates with greater quantities appear not to be objectionable, where ascending royalty rates may be objectionable.[29]

In *Rocform* v. *Acitelli-Standard Concrete Wall*[30] it was held that a license which charged a standard fee for each use and had no provision for diminishing the fee at the time of expiration of the most important patent and which had no termination clause at the will of the licensee constituted a misuse even though the basic patent was still in force and even though the defendant was not a licensee. The court thought that this contemplated an illegal prolongation of monopoly.

In connection with package licensing or illegal prolongation of monopoly, several cases should be distinguished. One is a case where the base is different but the royalty rate is the same. For example, one patent relates to bleaching flour and another patent relates to bleaching cloth, but the royalty is 5 percent of the consumable materials in each case. There would be no logical reason why it would be necessary to charge a different royalty rate in such a license after one patent had expired, since in any instance the royalty was being derived from completely different bases. There would, however, be another case where a license covers several patents all relating to bleaching flour by the same general process, and one of these patents expired. Then there might be an obligation to either charge a different royalty rate from then on or to give the licensee an unrestricted option to cancel.

---

[27] *Supra* note 17, 35 *ABA Antitrust* LJ 126.

[28] 257 F. Cupp. 192, 150 *USPQ* 180 (N.D. Ill. 1966) 35 *ABA Antitrust LJ* 130 (1967).

[29] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 181.

[30] 367 F. 2d 678, 151 *USPQ* 305 (6th Cir. 1966), 35 *ABA Antitrust LJ* 128 (1967).

In *Hazeltine Research* v. *Zenith*,[31] the plaintiff sought to grant a package license under 500 patents. Zenith was only using about three of these patents and refused to take a license. Prior to suit, Hazeltine offered to license any one patent for 50 percent of the package rate, any two patents for 80 percent of the package rate and any three or more patents for 100 percent of the package rate. Zenith refused to take this license. After suit, Hazeltine offered to license nine color television patents at an annual royalty of $435,000, all color patents issued and applied for at an annual royalty of $500,000, or the package of all patents at an annual royalty of $150,000. Zenith again refused. The court held that there was misuse which prevented Hazeltine from recovering in its infringement suit, and that Hazeltine was liable to Zenith for damages equal to the cost of Zenith's defense, $50,000, trebled to make total damages of $150,000. In discussing the injunction to be used against Hazeltine, the court held that it was not per se unlawful to offer to license individual patents at rates the sum of which were greater than the package rate, so long as the rates charged for individual patents were not so disproportionate to the package rate as to amount to economic coercion to force the taking of the package license. The lower court had found a violation of the antitrust law by Hazeltine's activities in the foreign field and had awarded total damages against Hazeltine of more than $34 million, but the Court of Appeals held that these damages had not been proved.

In *International* v. *Landon*[32] it was held that where parties owned blocking patents and it was not possible to utilize the practical invention without licenses under all of them, it was entirely proper to require that licenses be obtained under all of these patents and that no misuse was involved.

There are some areas where in the case of a group of patents the policy of the law as to package licensing and the supposed policy of the law as to use restrictions may come in conflict. For example, if there is a group of patents which includes an article patent and two process patents to uses of the article in different fields, under the package licensing doctrine the user would seem to be able to pick and choose as to how many of the patents he wanted to take a license on. This would be true regardless of whether it would have the effect of preventing him from using the article which he had purchased from the patentee in the area of use for which he had not received a license under the appropriate process patent. So long as this is not a subterfuge for

---

[31] 388 F. 2d 25, 156 *USPQ* 229 (7th Cir. 1967). *Certiorari* has been granted.
[32] 336 F. 2d 723, 142 *USPQ* 421 (9th Cir. 1964).

something which otherwise would be fundamentally against the antitrust laws, it would seem that the doctrine as to package licensing should control.

Of course, it may be quite dangerous for a patent owner by agreement with his licensee to require future agreement between them if any additional sublicenses or licenses are to be granted.[33]

There is some authority to indicate that territorial restrictions imposed on a purchaser of a patented apparatus, article or composition are not within the scope of the patent law and not legal.[34]

Although not a patent case, *U. S.* v. *Arnold Schwinn*[35] may often be cited where territorial limitations are involved. The court criticized restrictions on Schwinn retailers after title had passed which prevented them from selling to unlicensed retailers. The court indicated, however, that in those cases where title and risk of loss remained in Schwinn it was proper for Schwinn to so restrict sale.

The licensee should not be forbidden to engage in activity beyond the patents.[36] A recent case on this point is *Columbus* v. *Goldberg*[37] which held that a license which forbids the licensee from manufacturing a competitive shock absorber constitutes misuse.

---

[33] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 349.

[34] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 321, 322.

[35] 388 U.S. 365 (1967), 36 *ABA Antitrust LJ* 53, 54 (1967). A note at 388 U.S. 379 states that the possible effect of patents has not been considered.

[36] Nordhaus and Jurow, *Patent-Antitrust Law* (1961) 162.

[37] 264 F. Supp. 779, 153 *USPQ* 97 (Col. 1967), 35 *ABA Antitrust LJ* 129 (1967).

Although the primary purpose of *IDEA* is to communicate the research work of the Institute, it also serves as an educational vehicle for the exchange of informed opinion. The positions taken by the authors of papers and notes in this section are not necessarily those of the Institute. It is hoped that the material published in this section will stimulate researchers to undertake further study of the issues.

The World Intellectual Property Organization and the Administrative Reorganization of BIRPI

EUGENE M. BRADERMAN*

INTRODUCTION

ON JULY 14, 1967, AT THE MINISTRY OF FOREIGN AFFAIRS in Stockholm, Sweden, the representatives of 43 governments signed the Convention Establishing the World Intellectual Property Organization (WIPO).[1] This date may well become one of the most significant in the history of intellectual property[2] for it marks the establishment of

* The author is Deputy Assistant Secretary of State for Commercial Affairs and Business Activities, U.S. Department of State.

[1] The WIPO Convention was open for signature until January 13, 1968. As of that date, eight more countries had signed the Convention making a total of 51 signatory countries.

[2] "Intellectual property" is used in this article in the same sense that it is in the WIPO Convention, that is, industrial property and copyrights.

the first legally constituted organization with responsibilities centered in this important field.

In his closing address to the Intellectual Property Conference of Stockholm the President of the Conference, Swedish Minister of Justice, Herman Kling stated the aims of the new organization—"to contribute to better understanding and cooperation among States for their mutual benefit on the basis of respect for their sovereignty and equality and to promote the protection of intellectual property throughout the world in order to encourage creative activity."[3]

Also speaking at the closing session, the Director of BIRPI, G.H.C. Bodenhausen, summarized succinctly the general feeling of the participants in the Conference that the administrative reorganization of BIRPI and the creation of a modern organization "have been decisions of historical importance."[4] Following the Conference, the Rapporteur-General for the worldwide International Association for the Protection of Industrial Property (AIPPI), Paul Mathély, stated in his report on the Conference that the WIPO Convention "marks a considerable step forward for the rights of intellectual property in the world."[5]

Background

When the Paris and Berne Unions[6] were established in 1883 and 1886 respectively, each Union had a separate Secretariat. The two Secretariats were united in 1893 and for the last ten years or so have generally been referred to as BIRPI (Bureaux Internationaux Réunis pour la Protection de la Propriété Intellectuelle). In accordance with the practice of the 1880's, the Secretariats were placed under the authority of the government of the Swiss Confederation, which also generally assumed the duties of administering the Conventions.

After the 1958 Lisbon Conference for the Revision of the Convention of Paris for the Protection of Industrial Property (hereafter referred to as the Paris Convention), the member States of the Paris Union felt a need to exercise a greater degree of influence on the development of the Paris Convention and on the functioning of

---

[3] BIRPI Document S/P/PV/No. 7 (July 14, 1967), p. 2.

[4] *Ibid.*, p. 7.

[5] AIPPI, *Annual Report 1967/III*, p. 101.

[6] The term "Union" is used to designate the member States of the Convention of Paris for the Protection of Industrial Property (Article 1[1]) and the Berne Copyright Convention (Article 1).

BIRPI. As a consequence, the Paris Union member States formed an advisory body—know first as the Permanent Bureau and later as the Executive Committee—which acted in conjunction with the Permanent Committee of the Berne Union to form an Interunion Coordination Committee. This Coordination Committee unanimously approved a recommendation in September 1962 that a study be undertaken looking toward an administrative reorganization of the two Unions and BIRPI in accordance with current practices in international organizations.

On the basis of the 1962 recommendation BIRPI drafted certain proposals for the administrative revision of the Paris and Berne Conventions and the BIRPI Secretariat which were first submitted to a ten-country Working Party in May 1964, and then to meetings of a Committee of Governmental Experts in March-April 1965 and May 1966 to which all Paris and Berne Union member States were invited.[7] Several intergovernmental and international nongovernmental organizations were represented at the 1965 and 1966 meetings, including the two principal nongovernmental organizations active in this field, the International Association for the Protection of Industrial Property (AIPPI) and the International Chamber of Commerce.

After the May 1966 meeting of the Committee of Governmental Experts important changes were made in the draft texts of the documents that were to be presented to the Stockholm Conference. The revised texts became available in September 1966 and U.S. government officials then met with a broadly representative group of the principal private interests to discuss the administrative reorganization of BIRPI and the creation of the new intellectual property organization. Further, government representatives attended meetings of the American Group of AIPPI in October 1966 and January 1967 to discuss these matters and to hear the views of the AIPPI members. As indicated below, the views of the various private organizations were fully taken into account and were reflected in proposals by the United States at Stockholm, most of which were adopted.[8]

In September 1966 the documentation for the Intellectual Property Conference of Stockholm was sent to the 129 governments and the 46 intergovernmental and international nongovernmental organizations invited to the Conference. All administrative, including financial matters relating to each convention or agreement were dealt with in separate documents prepared by BIRPI at the request of the govern-

[7] Thirty-seven member States attended the 1965 meeting and 39 attended the 1966 meeting.

[8] *Infra*, p. 16.

ment of Sweden as the host government. These documents, containing the proposed texts of conventions or agreements, were BIRPI Documents S/3, S/4, S/5, S/6, S/7, S/8 and S/9 dealing respectively with the Paris (Industrial Property), Madrid (Trademarks), Madrid (False Indications of Origin), The Hague (Industrial Designs), Nice (Classification of Goods and Services Concerning Trademarks), Lisbon (Appellations of Origin), and Berne (Copyrights) conventions or agreements. Administrative matters of common interest to two or more of these conventions or agreements, as well as the establishment of the new intellectual property organization were dealt with in BIRPI Document S/10, *Convention Establishing the International Intellectual Organization.*

During a period of five weeks—from June 12 to July 14, 1967— the representatives of more than 60 governments met in Main Committees IV and V in the Swedish Riksdag building to revise the administrative provisions of the Paris Convention and other conventions administered by BIRPI, and to establish a new World Intellectual Property Organization. After lengthy and, at times, very difficult negotiations, the Stockholm Revision, or Stockholm Act, of the Paris Convention[9] and the Convention Establishing the World Intellectual Property Organization were approved unanimously by all governments participating in the two main Committees. These included every major developed country and numerous developing countries from every part of the world.

Administrative Revision of the Paris Convention

An administrative reorganization of BIRPI as the Secretariat for the Paris Convention necessarily involved a revision of the administrative provisions of that Convention. This revision was needed since no organizational reform of real significance had taken place since the negotiation of the Paris Convention in 1883. The membership had increased from 20 member States in 1884 when the Convention came into force to 77 members in 1967 at the time of the Stockholm Conference. Included in the 77 member States were many developing countries and countries with diverse economic systems. (As of January

[9] Essentially the same administrative revisions were carried out with respect to all of the special industrial property arrangements under the Paris Convention as well as the Berne Copyright Convention. For this reason and the fact that the United States is a party only to the Paris Convention, hereafter reference will be made primarily to the administrative revision of the Paris Convention.

1, 1968, there were 79 member States in the Paris Union.)

During the more than 80 years that the Paris Convention has been in force there have been many changes in administrative practices and principles with respect to international organizations. Yet prior to the Stockholm Conference, the Paris Union was laboring under the outdated administrative structure set up in the 1880's.

The system for financing the International Bureau for the Protection of Industrial Property (i.e. BIRPI) as the Secretariat for the Paris Convention is one example of the absurdity of this situation. Under this system the budget of BIRPI, having been written into the Paris Convention, was subject to change only by unanimous consent of all member States at a diplomatic conference! The last time unanimity was achieved on contributions of Paris Convention member States was more than 40 years ago at the diplomatic conference at the Hague when a budget of 120,000 Swiss francs was approved and the average contribution by a government was about $360.[10] As a consequence, the majority of Paris Union countries agreed at subsequent revision conferences to increase their contributions on a voluntary basis in order to supplement the wholly inadequate budget in The Hague text.[11]

As noted above, the preparatory work for the revision of the administrative provisions of the Paris Convention was undertaken on the basis of a recommendation approved unanimously by the Interunion Coordination Committee in September 1962. The basic document for the Stockholm Conference that resulted from this preparatory work was entitled, "International Convention for the Protection of Industrial Property—Proposals for Revising the Administrative Provisions and the Final Clauses (Articles 13 to 20)."[12]

Main Committee IV of the Intellectual Property Conference of Stockholm began its work on June 13 and terminated it on July 10. As in the case of the WIPO Convention, a signing ceremony was held on July 14 and 39 countries signed the Stockholm Act of the Paris Convention. During the period up to January 13, 1968, while the Convention was open for signature, an additional seven countries signed.

---

[10] Paris Convention: Act of The Hague, Article 13.

[11] The current voluntary contribution of the United States is less than $10,000. When the Stockholm Act of the Paris Convention comes into force, the budget of the Paris Union will no longer be on a voluntary basis. Then the Assembly of the Union will adopt its triennial budget by a two-thirds vote rather than unanimity and the amount of the budget will no longer be written into the text of the Convention. (Articles 13, 16.)

[12] BIRPI Document S/3, dated September 16, 1966.

The main revisions of the Convention are:

(1) Creation of new organs—an Assembly composed of all member countries, and an Executive Committee, composed of one-fourth of the member countries;

(2) Transfer from the government of Switzerland to the governments of the member countries of supervision of the Secretariat (BIRPI), supervision of the accounts of the Secretariat, and approval of the program and budget;

(3) Institution of a more flexibile financial system;

(4) Provision for a simplified system of amendment which will apply only to the administrative provisions; and

(5) Transfer of the responsibility of preparing for revision conferences from the host country to the organs of the Union.

Numerous changes were made during the Conference in the proposed text of the Paris Convention set forth in BIRPI Document S/3. Many of these changes were proposed by the United States to take account of the suggestions of various private industrial property organizations in the United States. These organizations were ably represented on the United States delegation by Francis Browne, President, American Group, International Patent and Trademark Association (US-AIPPI); John Schulman, Vice-President, American Patent Law Association; and A. L. Snow, President, United States Trademark Association.

One point of major concern to the American Group of the International Patent and Trademark Association was the role of nongovernmental organizations such as AIPPI in the preparatory work for revision conferences of the Paris Convention. The United States therefore proposed the addition of the following provision which was adopted by the Conference and is included in Article 15 (7) (b):

> The International Bureau may consult with intergovernmental and international nongovernmental organizations concerning preparations for conferences of revision.

This provides a legal basis in the Paris Convention for the International Bureau—that is, BIRPI—to consult with international nongovernmental organizations such as AIPPI on revision conferences concerning that Convention. No basis for such consultation existed in the Lisbon Text of the Paris Convention. Further, it is important to note that, during the meeting of Main Committee IV on the administrative reorganization of the Paris Convention, Arpad Bogsch, Deputy Director of BIRPI, in commenting on Article 18 of the Paris Convention relating to revision conferences, stated that Article 18 should, of

course, be read in conjunction with the above-mentioned Article 15 (7)(b). He stated that the clear intent of these two provisions was that the Secretariat "would consult and convene committees of experts, including representatives and observers from private organizations, when preparing conferences of revision."[13]

Since certain statements have been made suggesting that, as a result of the changes made in the Paris Convention at Stockholm, the initiative for diplomatic revision conferences has shifted from "the private sector" to the "government sector," it would be useful to look briefly at the background of the Lisbon Conference (1958) for the revision of the Paris Convention.

The Lisbon Conference was called on the initiative of the member States of the Paris Convention. A resolution of the London Conference (1934), approved by member States of the Paris Union, fixed the place of the next revision conference at Lisbon, Portugal, with the time to be set by the government of Portugal and the International Bureau. A preparatory meeting of selected countries (Portugal, United States, United Kingdom, France, Germany, Italy and Switzerland) was held in 1955. Although the invitees were to act as an advisory committee of experts and not as government representatives, they were selected by their respective governments. The United States representatives were the Commissioner of Patents, Robert C. Watson, and Examiner-in-Chief, P. J. Federico.

The purpose of the meeting was to consider proposed amendments to the Paris Convention which originated with private industrial property organizations, the International Bureau, and the countries represented at the meeting. The government of Portugal and the International Bureau then acted upon the recommendations of the Committee of Experts in drawing up a final agenda. Preparatory work for the Lisbon Conference in the United States was undertaken by an Interdepartmental Committee of all interested government agencies, which considered carefully all the recommendations of a private Advisory Committee, which had been appointed by the Commissioner of Patents at the request of the Secretary of State. And so, while the private sector played an important role with respect to the Lisbon Revision of the Paris Convention, the Conference was an intergovernmental conference.

Another point of major concern to private organizations in this country and in certain other countries was that the "autonomy and independence of the Unions be entirely respected." As a result,

---

[13] Stockholm Document No. S/IV/PV/No. 15 (July 8, 1957), p. 15.

changes were made in the proposed text of the Paris Convention, either at the suggestion of or with the support of the United States. For example, on the basis of a joint proposal by France, Germany, Italy and the United States, the articles dealing with finances of the Paris Union were amended so as to separate completely the finances of the Paris Union from those of WIPO.[14]

As regards the independence of the Paris and Berne Unions, the comments of the Rapporteur of Main Committee V, Joseph Voyame,[15] are direct and unequivocal: "The Unions retain their complete independence and their own tasks."[16] The Rapporteur-General of AIPPI, Paul Mathély, also commented on this point in his report on the Stockholm Conference. He noted that the AIPPI President's Conference in Paris in 1967 had approved the principle of the creation of WIPO on the condition that "the autonomy of the Unions be entirely respected." He concluded that "this condition is entirely respected."[17]

A limited few have advanced the proposition that the transfer of responsibility for the supervision of BIRPI and the administration of the Paris Convention from the Swiss Government to the member States constitutes an unjustifiable intervention by governments in the field of private industrial property rights. This point was not raised at the Stockholm Conference by representatives of any government or private organization. The Paris Convention, of course, is and has been an intergovernmental agreement since its inception in 1883. Further, private industrial property rights are not directly derived from the Convention but are granted by governments under national laws.

In view of the widespread current interest in the United States in the proposed Patent Cooperation Treaty and certain misunderstandings about the relationship of the Treaty to the WIPO Convention it is pertinent to note that the Patent Cooperation Treaty would be a "special arrangement" under the Paris Convention—not WIPO. This draft Treaty is being considered by Paris Union countries under the umbrella of the Paris Convention. If the proposed Treaty comes into being, any revision of it would be undertaken by the member States of the Patent Cooperation Treaty—not by member States of WIPO.

---

[14] BIRPI, *Reports on the Work of the Five Main Committees of the Intellectual Property Conference of Stockholm, 1967* (Geneva 1967), p. 112 (hereafter cited as *Stockholm Main Committee Reports*).

[15] Mr. Voyame was a member of the Delegation of Switzerland. He is the Director of the Swiss Federal Bureau of Intellectual Property.

[16] *Report of the Stockholm Main Committees*, p. 125.

[17] AIPPI, *Annual Report 1967/III*, p. 101.

It was the view not only of the United States but also of virtually every government attending the Stockholm Conference that the institution of administrative and structural reforms of the Paris Convention was long overdue. Illustrative of this viewpoint was the statement of the representative of the Federal Republic of Germany who said that his government "welcomed the proposal to modernize the administrative structure of the Paris and Berne Conventions . . . It was time to adapt these Conventions to new requirements of international law."[18] Further, there was general recognition that the modernization of the Paris Convention which was accomplished by the Stockholm revision will make it a more effective Convention.

WIPO Convention

The arduous task of negotiating and drafting a new convention to establish an international organization to deal with intellectual property[19] was entrusted to Main Committee V. This Committee began its deliberations with a discussion of the fundamental question as to whether the new organization should be established. The general view was reflected in the statement of the representative of the Federal Republic of Germany who welcomed the proposal to establish an international organization for the protection of intellectual property.[20]

It may be useful at this point to set forth the principal features of the Convention:

(1) A new organization, WIPO, is established alongside the Paris and Berne Unions, to which any member State of these Unions, and States that satisfy the conditions in the membership provision (Article 5), shall be eligible for membership.

---

[18] Stockholm Document No. S/V/PV/No. 1 (June 21, 1967), p. 5.

[19] Article 3 (viii) of the WIPO Convention states that "intellectual property shall include the rights relating to:

—literary, artistic and scientific works,
—performances of performing artists, phonograms, and broadcasts,
—inventions in all fields of human endeavor,
—scientific discoveries,
—industrial designs,
—trademarks, service marks, and commercial names and designations,
—protection against unfair competition,

and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields." (Special mention should be made of the valuable assistance rendered by the private industrial property advisors on the U.S. Delegation—Messrs. Browne, Schulman, and Snow—in the drafting and negotiating of this definition.)

[20] BIRPI Document S/V/PV/No. 1 (June 21, 1967), p. 5.

(2) Essentially, WIPO is responsible for the overall coordination of common administrative activities of the Unions and the promotion of the protection of intellectual property on a worldwide basis.

(3) The Secretariat of the existing conventions and of WIPO is to be taken over by the International Bureau for the Protection of Intellectual Property, which is a continuation of the present Secretariat, BIRPI.

(4) A number of new organs are created including the General Assembly, the Coordinating Committee and the Conference. The General Assembly is the supreme organ of WIPO and, among other things, exercises supervision of the International Bureau, e.g., the General Assembly gives all necessary instructions to the Director General, who is in charge of the International Bureau, Article 5 (2) (ii).

Prior to the Stockholm Conference certain important organizations in the United States and abroad interested in industrial property matters raised some questions about the text of the WIPO Convention as set forth in BIRPI Document S/10 and made a number of suggestions for improvement of the text. One of the principal concerns was that the autonomy and independence of the Paris and Berne Unions be respected. As has been noted, the United States and other governments were responsive to this view and suggested changes in the Paris Convention to ensure the autonomy of that Union; these were adopted.[21] Other changes with respect to this point were also proposed in relevant articles in the WIPO Convention and were accepted.[22]

The United States government carefully studied all the questions raised by, and proposals of, private organizations in the United States. Significantly, most of these proposals were put forward and adopted at the Stockholm Conference and many of them were introduced by the United States alone or jointly with other countries.

Objectives of WIPO

The Preamble and Article 3 of the WIPO Convention set forth the basic objectives of the organization. They are: "to promote the protection of intellectual property throughout the world through cooperation among States" and "ensure administrative cooperation among the

---

[21] *Supra,* pp. 11-12.
[22] *Infra,* pp. 18-21.

Unions." Essentially the same objectives are stated in the Preamble, which also includes a caveat about "fully respecting the independence of each of the Unions."

Functions of WIPO

The major functions of WIPO are set forth in Article 4. In line with the Preamble and Article 3, the first task of the new organization is to improve the protection of intellectual property worldwide. Article 4 also provides that the organization "shall perform the administrative tasks of the Paris Union, the Special Unions established in relations with that Union, and the Berne Union."

General Assembly

As a result of changes in Article 6 made during the Stockholm Conference, there is now no question that the General Assembly, which is composed *only* of Paris and Berne Union member States, is the "supreme organ" of the organization. For example, with the adoption of a joint proposal (S/93) submitted by a number of governments, including the United States, the General Assembly has the sole responsibility for adopting the triennial budget of expenses common to the Unions (Article 6[2] [iv]). Under the BIRPI draft text the approval of the budget would have been vested in the Conference in which both Union and non-Union member States participated (Article 7[2] [a] [ii], S/10). The General Assembly also appoints the Director General upon nomination of the Coordination Committee (Article 6[2] [i]). Regular sessions of the General Assembly are held every three years.

Coordination Committee

The Coordination Committee consists of States party to the WIPO Convention which are members of the Paris Union Executive Committee, or the Berne Union Executive Committee, or both. The Coordination Committee, which meets annually, serves as the executive organ of the General Assembly and the Conference. One of its principal functions is to advise the various organs of the Paris and Berne Unions and WIPO on administrative and financial matters of common interest

to two or more of the Unions, or one or more of the Unions and WIPO itself, especially with respect to the budget of common expenses of the Unions.

Some delegations, including the United States, and nongovernmental organizations such as AIPPI, were concerned about the participation of non-Union countries in the Coordination Committee, as set forth in BIRPI Document S/10. As a result, Article 8 (1) (c) was redrafted to set forth more explicitly and to limit the participation of non-Union countries in that Committee. Non-Union countries may participate in meetings of the Coordination Committee only when it considers "matters of direct interest to the program or budget of the Conference and its agenda, or proposals for the amendment of this Convention which affect the rights or obligations" of non-Union members of WIPO.

Conference

Prior to Stockholm, BIRPI held a number of ad hoc regional industrial property seminars for developing countries, most of which were not members of the Paris Union. Some industrialized countries, including the United States, participated in these seminars. The usefulness of these seminars gave rise to the concept of the Conference as a regularly constituted organ of WIPO.

The major functions of the Conference—as set forth in BIRPI Document S/10—to serve as a forum for an exchange of views in the intellectual property field among all member States of WIPO, both Union and non-Union members, and as the responsible organ for the development of legal-technical assistance programs for developing countries, remained unchanged. However, a number of proposals were adopted which clarify the role of the Conference in the organization itself and in relation to the Paris and Berne Unions.

Thus, Article 7 as revised provides that the Conference will have its own budget to finance the program of legal-technical assistance and the expenses of the Conference (Article 7[2] [ii] and [iii]), but the other common expenses of the organization will be handled in the General Assembly (S/93). These revisions were made to insure the autonomy of the Paris and Berne Unions. Further, the BIRPI proposal in Article 7 (2) (a) (i) in S/10 provided that the Conference could adopt "resolutions and recommendations" relating to "matters of general interest" in the intellectual property field. On the proposal of the United States (S/125) the word "resolution" was deleted since it

was felt that the single word "recommendations" set forth more clearly the role of the Conference in this respect. In addition, a phrase was inserted in Article 7 (2) (i) providing that in adopting "recommendations" the Conference would have "regard for the competence and autonomy of the Unions." Another United States proposal provided that voting in the Conference be raised from a simple majority to a qualified majority of two-thirds of the votes cast in line with voting in the General Assembly.

Main Committee V unanimously approved the deletion of the terms "Full Members" (i.e. States members of any of the Unions) and "Associate Members" (i.e. States not members of any of the Unions) because of the discriminatory connotation of the latter term. Instead of these terms the concept of Union and non-Union members is used wherever appropriate throughout the Convention. Regular sessions of the Conference are to be held once every three years and at the same time and place as the General Assembly.

Finances

Each of the two principal Unions—Paris and Berne—has its own budget which is dealt with exclusively by the Assembly of that Union. As regards WIPO, BIRPI Document S/10 provided that the organization was also to have its own budget. However, as has been indicated above, there was a general feeling that the provision in the WIPO Convention should be clarified as regards budgetary items relating to common expenses of the Unions and to the Conference. Therefore, a joint proposal of the United States and several other delegations (S/93), as adopted, provides that the organization shall have two separate budgets—the budget of expenses common to the Unions fixed by the Assembly of each Union, and the budget of the Conference (Article 11[1]). Cognizance should be taken of the fact that contributions of the Paris and Berne Unions toward the expenses of WIPO are to be fixed by the Assembly of each Union and that each Union shall be free to abstain from contributing to the Conference budget.

Amendments

Changes made in the provision relating to amendments of the WIPO Convention (Article 17) ensure that proposed amendments

will be given careful study; and their adoption will require a highly qualified majority in the Assemblies of the Paris and Berne Unions. Proposed amendments must be communicated to the member States at least six months in advance of their consideration by the WIPO Conference. Their adoption will require a three-fourths majority vote in the respective Assemblies of the Paris and Berne Unions before the Conference can act on them. (WIPO Convention, Article 17[2]; Paris Convention, Article 17[2]). The voting in the Conference is by a simple majority. Furthermore, amendments will enter into force only after written notification of acceptance has been given by three-fourths of the member States entitled to vote. Non-Union States may take part in the vote in the Conference and may be counted among the required acceptances *only* if the amendments would affect their specific rights and obligations as set forth in the WIPO Convention.

Observers from Nongovernmental Organizations

Another point of concern to international nongovernmental organizations was their attendance as observers at meetings of the various organs of the new organization. The final text of the WIPO Convention, as approved at Stockholm, provides that the General Assembly (Article 6[2] [ix]) and the Conference (Article 7[2] [v]) may invite as observers to their meetings delegates of international nongovernmental organizations. This was one of two major points of interest to the International Association for the Protection of Industrial Property and was especially noted in Paul Mathély's report on the Stockholm Conference.[23]

Observations and Conclusions

The question of the future role of the private sector with regard to international industrial property and copyright matters is an important one. Various agencies of the United States government have been consulting and working closely with interested private groups on these matters during the past several years. There was consultation in connection with the Geneva Conference on the Universal Copyright Convention (1952); the Lisbon Conference on the Paris Convention (1958); the Hague Conference on the Agreement for the International Deposit of Industrial Designs (1960); the Rome Conference on the

[23] AIPPI, *Annual Report 1967/III*, p. 101.

Convention for the Protection of Performers, Producers of Phonogram Records and Broadcasting organizations (1961); the Stockholm Conference on the Paris Convention; the WIPO Convention and the Berne Convention (1967). In addition, there has been consultation on a wide variety of intellectual property matters from time to time as the need arose. Such consultation is most useful. It provides a means by which the government and concerned private groups can exchange views and develop programs which will further United States intellectual property interests. The Department of State is currently establishing advisory groups in the international intellectual property field.

The United States government fully recognizes the importance of the foreign industrial property rights of American nationals. Effective protection of these rights is a fundamental objective of our foreign policy in this area. The administrative changes in the Paris Convention and the new WIPO Convention are fully consistent with that objective. We consider that these administrative changes in the Paris Convention and the establishment of WIPO will advance industrial property protection on a worldwide basis. This was an overriding consideration in the development of the United States position on these matters. In this connection attention may be drawn to the fact that other major industrialized countries which also have valuable private industrial property rights at home and abroad unanimously approved in the Plenary Sessions at the Stockholm Conference both the administrative revision of the Paris Convention and the WIPO Convention.

The revision of the administrative provisions of the Paris Convention at the Stockholm Conference have in no way affected the substantive provisions of that Convention nor the manner in which these substantive provisions are implemented by member States of the Convention. The "national treatment" provision remains the keystone of that Convention and, of course, is a legal concept followed by national governments in administering their industrial property laws in relation to foreign nationals. Other provisions of the Convention such as the "right of priority" will be implemented in the future, as in the past, by national governments.

We believe there is need in the world today to establish an international organization such as WIPO which is oriented toward intellectual property protection. This certainly does not imply that WIPO will try to exclude any other international organizations such as UNCTAD (United Nations Conference on Trade and Development), UNIDO (United Nations Industrial Development Organization), UNCITRAL (United Nations Commission on International Trade

Law), and UNESCO (United Nations Educational, Scientific and Cultural Organization) from acting in the intellectual property field. However, it does mean that there will in fact be a distinctive and legally constituted organization—the World Intellectual Property Organization—operating with special competence in this field.

BIRPI has done some fine work with respect to legal-technical assistance to developing countries, as even the critics of WIPO have acknowledged. For example, ad hoc regional industrial property seminars have been held and model patent and trademark laws have been drafted. The success of these programs, which resulted from the close cooperation between BIRPI and the member States of the Interunion Coordination Committee, was in part the stimulus for the creation of WIPO. Thus, WIPO makes specific provision for a legal-technical assistance program for developing countries on a continuing basis (Article 7). Since the WIPO Convention provides a forum for developing countries in the Conference, there is good reason to believe that cooperation and communication between developing and industrialized countries will be improved. Obviously this can be most important in arriving at reasoned solutions to the complex industrial property problems with which we are presently confronted.

Evidence of the new interest of developing countries in the proposed organization is attested to by the fact that almost 40 developing countries were represented in Main Committee V which considered the WIPO Convention and nearly half of them have signed it.

As is the normal practice, the Convention will enter into force when a specified number of States have ratified or acceded to it. Only ratifications or accessions by member States of the Paris or Berne Unions will be counted for this purpose. According to Article 15, the Convention will enter into force after ten States bound by the new administrative provisions of the Paris Convention and seven States bound by the new administrative provisions of the Berne Convention[24] have either ratified or acceded to the WIPO Convention. One country proposed at Stockholm that a much higher number of countries should be necessary to bring the Convention into force. However, the proposal was rejected by Main Committee V, which felt that the Convention ought to enter into force as soon as possible.

The United States could take advantage of the transitional provisions of the WIPO Convention (Article 21) and for a period of five years after entry into force of the Convention exercise the same rights

[24] Article 15 also provides that if a ratifying State is a member of both Unions, it will be counted in both groups.

as if it had become a party to the Convention. Some have suggested that the United States should follow this procedure. We do not agree. We believe the United States should proceed along the customary lines as regards ratification of a treaty and therefore the Convention should be submitted to the Senate for its advice and consent. This being the case it would appear desirable for the United States as the country with the most valuable foreign industrial property and copyright interests in the world to move ahead expeditiously toward membership in the only international organization devoted exclusively to intellectual property protection.

It would be naive to assume that the World Intellectual Property Organization alone will be able to resolve all of the complex problems of developed and developing nations in the intellectual property field. It will not. However, it will undoubtedly assume a paramount role in this field just as the Food and Agriculture Organization has in the agriculture field and the World Health Organization has in public health. This could be of inestimable value to the United States in relation to effective protection of the foreign industrial property rights and copyrights of our nationals.

The 1960's have been a decade of ferment and change in the industrial property and copyright fields. Some of the changes have advanced protection in these fields. On the other hand, changes in certain countries have reduced the level of protection. We believe that the new WIPO will be better prepared to cope with the rapidly moving developments concerning industrial property and copyright protection occurring all over the world. Administratively it will be a more efficient organization. Substantively it will provide a forum to which industrialized as well as developing countries may bring intellectual property matters which can be considered by technical experts assisted by a technically competent secretariat in an atmosphere conducive to reasoned and objective discussions. With WIPO working closely with other international organizations on matters of mutual interest and with reasonable cooperation among the member States of the organization, we believe, in the eloquent words of the Rapporteur for Main Committee V, that "WIPO will be able to achieve the noble purpose which has been assigned to it and give effective encouragement to creative activity, thereby contributing to the spiritual enrichment and the material well-being of mankind as a whole."

WIPO: A Noble Idea Whose Time Has Come

HARRY GOLDSMITH*

SUMMARY

THE CONVENTION ESTABLISHING the World Intellectual Property Organization (WIPO) is examined and its pros and cons explored. The author comes to the conclusion that it would be to the enlightened self interest of the United States to adhere to this Treaty.

"MAN MUST BE CREATIVE"—Old Chinese Saying

In a most significant spirit of international cooperation, some 70 countries of the world in a month-long Conference in Stockholm

* The author is Patent Counsel of CIBA Corporation, Summit, New Jersey.

(June 12 to July 14, 1967) created a Convention establishing the World International Property Organization (WIPO). The text of the Convention and the Report on the work of Main Committee V which drafted the Convention was published in the *Official Gazette* on April 23, 1968, pages 893-906.

Now the nations of the world are being called upon to ratify the Treaty. The feat of drafting this Convention or Treaty is indeed amazing when it is considered that countries of such widely divergent economic, political, cultural and social philosophies—as the United States, the USSR, Bulgaria, Cuba, Czechoslovakia, West Germany, Gabon, Hungary, Iran, Ireland, Israel, Italy, Ivory Coast, Japan, Madagascar, Indonesia, Holy See (Vatican), Morocco, and Rumania, worked harmoniously together to establish WIPO and assigned to it the noble purpose of promoting the protection of intellectual property throughout the world in order to effectively encourage creative activity in all countries, thereby contributing to the spiritual enrichment and the material well-being of mankind as a whole.

Another purpose: To ensure administrative cooperation among the various existing Unions concerned with patents, trademarks and copyrights—without in any way prejudicing their independence.

In pursuing these objectives, the participants expressed the idea that they were inspired by an even loftier purpose, namely the desire to contribute to better understanding and cooperation among States. The Convention starts out with the expression of that noble purpose in the Preamble.

Ireland has become the first country to ratify WIPO. In my opinion, it would be to the enlightened interest of the United States to be at least second, or to proceed with ratification as expeditiously as possible.

Three months after 10 member States of the Paris Union (patents and trademarks) and seven members of the Berne Union (copyright) have ratified it, WIPO will go into effect. Since there are some 80 State members of the Paris Union and 58 of the Berne Union, and since the great majority of the nations attending the Stockholm Congress signed the draft Convention, it would seem that the required ratifications will be reached relatively shortly. WIPO, it is predicted, may go into effect by 1969.

Origin

WIPO was incubated out of the study recommended in 1962 by the Coordination Committee of the Paris (1883) and Berne (1886)

Unions with the view toward reforming the Unions and the Secretariat of BIRPI (United International Bureaux for the Protection of Intellectual Property) and adapting them to present day intergovernmental organizations.

Created and working alongside the Paris and Berne Conventions, whose autonomy as to substantive and administrative matters it cannot touch, but being responsible for the overall coordination and harmonization of these and other Unions and for the promotion of intellectual property on a worldwide basis, WIPO, in the view of its supporters, will be most important in accomplishing and promoting in an advantageous way the basic effective protection of United States' interests abroad in the fields of foreign industrial and intellectual property.

Patents, trademarks and copyrights are collected under one administrative roof. Yet, somewhat analogous to the U.S. Constitution, with respect to the four organizational units of which it is composed, WIPO has a built-in system of checks, balances and safeguards. These are (1) the General Assembly, the supreme organ of the Organization, (2) the Coordination Committee, (3) the Conference and (4) BIRPI (the Secretariat) which is also the Secretariat of the existing Paris and Berne Unions and four special Unions dealing with international registration of trademarks (Madrid Arrangement), designs, appellations of origin and classification of goods.

When the objectives and functions of WIPO are considered, the beneficial effects against the possible alleged detrimental effects, it would appear that no country could afford not to join.

The motto of WIPO could well be that of the United States: "E pluribus Unum." In the Preamble of the Convention the contracting parties state their desires as follows:

> (1) To contribute to better understanding and cooperation among States for their mutual benefit on the basis of respect for their sovereignty and equality;
>
> (2) To encourage creative activity, to promote the protection of intellectual property throughout the world;
>
> (3) To modernize and render more efficient the administration of the Unions established in the fields of the protection of industrial property and the protection of literary and artistic works, while fully respecting the independence of each of the Unions.

Thus, WIPO preserves the autonomy and sovereignty of the Unions. It is designed to coordinate and harmonize the administrative procedures of the Unions and to modernize and provide for a more effective function of BIRPI by bringing the Secretariat under the joint administration of a single international organization composed of states which are members of the Unions—the General Assembly.

Private Sector Rights Recognized

Also in its provisions, which will be discussed later, WIPO recognizes the consultative and cooperative status of nongovernmental organizations representing inventors, industry, patent lawyers and patent agents. WIPO will strengthen the highly regarded and influential voice of this so-called private sector by giving it legal basis and recognition. Rather than being regarded in opposition to private groups, as misapprehended by some, it is designed as an instrument for advancing the objectives of the private sector. The good works and influence of such private sector groups as the International Association for the Protection of Industrial Property (AIPPI) and the Interamerican Association of Industrial Property (ASIPI), which have long records of fruitful cooperation with BIRPI, would be enhanced through provision for their attendance as observers at meetings of the supreme organ of WIPO, the General Assembly (Art. 6[2] [ix]) and the Conference (Art. 7[2] [v]). WIPO also provides for each government delegate to have advisors and experts, who could of course be from the private sector as has been the custom in the past at Diplomatic Intellectual Property Conferences. Recently the State Department has set up an Advisory Panel of representatives from some 10 nongovernmental organizations which will advise and consult with it in the field of protection of intellectual property throughout the world. Representatives from the following organizations have been invited to become members of this Panel:

American Bar Association
American Patent Law Association
Association of Corporate Patent Counsels
National Association of Manufacturers
National Foreign Trade Council
National Council of Patent Law Associations
U.S. Chamber of Commerce
U.S. Council of the International Chamber of Commerce
U.S. Trademark Association
International Patent & Trademark Association (American Group AIPPI)

Objectives

The objectives of WIPO stated in the Treaty are also noble and useful:

> (1) To promote the protection of intellectual property throughout the world through cooperation among States and, where appro-

priate, in collaboration with any other international organization;

(2) To ensure administrative cooperation among the Unions.

FUNCTIONS

In order to attain the above objectives, the Treaty provides that WIPO, through its appropriate organs, and subject to the sovereignty of each of the Unions:

(1) Shall promote the development of measures designed to facilitate the efficient protection of intellectual property throughout the world and to harmonize national legislations in this field;

(2) Shall perform the administrative tasks of the Paris Union, the Special Unions established in relation with that Union, and the Berne Union;

(3) May agree to assume, or participate in, the administration of any other international agreement designed to promote the protection of intellectual property;

(4) Shall encourage the conclusion of international agreements designed to promote the protection of intellectual property;

(5) Shall offer its cooperation to States requesting legal-technical assistance in the field of intellectual property;

(6) Shall assemble and disseminate information concerning the protection of intellectual property, carry out and promote studies in this field, and publish the results of such studies;

(7) Shall maintain services facilitating the international protection of intellectual property and, where appropriate, provide for registration in this field and the publication of the data concerning the registrations;

(8) Shall take all other appropriate action.

Formation of WIPO is a brilliant achievement in international cooperation which would:

(1) Counter the trends toward undermining, erosion and weakening of industrial property rights;

(2) Broaden the scope of subject matter entitled to protective rights. It defines intellectual property in its widest sense to include the rights relating to:

(a) Inventions in all fields of human endeavor;

(b) Scientific discoveries (which are not yet protected as intellectual property in the majority of countries);

(c) Industrial designs;

(d) Literary, artistic, and scientific works;

(e) Performances of performing artists, phonograms and broadcasts;

(f) Trademarks, service marks, and commercial names and designations;

(g) Protection against unfair competition; and

(h) All other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

Membership

Membership in WIPO is open to any State which is a member of any of the Unions administered by BIRPI, and to any other State, provided, in the latter case, that it satisfies one of the following conditions: (1) it is a member of the United Nations, or one of its specialized agencies, or the International Atomic Energy Agency, (2) it is a party to the Statute of the International Court of Justice, (3) it has been invited by the General Assembly of WIPO to become a party to the WIPO Convention.

Organs

There will be four organs of WIPO: a General Assembly consisting of the member States of the Organization which are also members of any of the Unions; a Conference consisting of the member States of the Organization whether or not they are members of any of the Unions; a Coordination Committee consisting of the member States of the Organization which are members of the Executive Committee of the Paris Union, or the Executive Committee of the Berne Union, or both; the International Bureau (BIRPI).

Operations

The detailed setup of WIPO is lucidly explained as follows in a report of a committee of the American Group, International Patent and Trademark Association, co-chaired by John Schulman, now president of that organization, and Horace B. Fay, Jr., former Assistant Commissioner of Patents.

The new organization will be governed by a General Assembly composed only of those countries which are members of either the Berne Union or the Paris Union or one of its related Unions (Art. 6). In that body each country will have but one vote irrespective of the number of Unions to which it adheres, and no non-Union country will be entitled to vote.

The General Assembly which will meet in regular sessions every three years, will not have any power or authority to change or modify any of the provisions of the Paris and Berne treaties. It will review reports of a Director General, who is to be elected by the Assembly upon the nomination of a Coordination Committee which will be

described below. It will also review the reports and activities of the Coordination Committee and give instruction to such Committee (Art. 6[2] [iii]). Part of the function of the Assembly will be to supervise the activities of both the Director General and the Coordination Committee.

The Coordination Committee (Art. 8), in turn will be composed of the members of the Executive Committees of the Paris and Berne Unions. Again each country serving on the Coordination Committee will have but one vote whether it be a member of the Executive Committee of one or both Unions. The function of the Coordination Committee will be to advise on all matters concerning finance and administration, prepare the agenda for the General Assembly and for the Conference (a body which will be discussed later), and to nominate a Director General. However, a limitation is imposed under which no action of the Coordination Committee will become effective unless it is concurred in by a majority of each group, namely the representatives of the Paris Union and those of the Berne Union who serve on the Coordination Committee. The Coordination Committee will meet each year.

The third organ of the Organization will be known as the Conference (Art. 7) and will include all States party to the convention whether or not members of any of the Unions. However, the Conference will not have a voice in the proceedings of the General Assembly or the Coordination Committee, except when this Committee considers matters of direct interest to the program or budget of the Conference. It will establish its own budget, part of which will be provided by contributions from those member States who are not members of any of the Unions, and part of which will be contributed by the Unions. Each Union will fix the amount of its own contribution. The budget will be used to defray the expense of holding the Conference meetings and the cost of any legal assistance programs upon which it embarks.

The treaty provides (Art. 7[2] [i] and [iii]) that the Conference shall:

> Discuss matters of general interest in the field of intellectual property, and may adopt recommendations relating to such matters, having regard for the competence and autonomy of the Unions;

and

> Within the limits of the budget of the Conference, establish the triennial program of legal-technical assistance.

The Secretariat of the Organization will be the International Bureau functioning under the Director General. The latter will be

appointed for a term of not less than six years and will be eligible for reappointment for successive terms. He will be nominated by the Coordination Committee but his election will require a majority vote, not only in the General Assembly, but also in the respective Assemblies of the Paris and Berne Unions (Art. 6 [3] [g]).

The International Bureau will no longer act under the supervision of the Swiss or any other government. It will be subject to the supervision only of the General Assembly. The obligations and responsibilities of the Director General and the Bureau in this aspect are stated as follows (Art. 9[8]):

> The nature of the responsibilities of the Director General and of the staff shall be exclusively international. In the discharge of their duties they shall not seek or receive instructions from any Government or from any authority external to the Organization. They shall refrain from any action which might prejudice their position as international officials. Each Member State undertakes to respect the exclusively international character of the responsibilities of the Director General and the staff, and not to seek to influence them in the discharge of their duties.

The Special Report of the American Bar Association, Patent Section Committee No. 102, International Patent Treaties and Laws, which recommends ratification of the WIPO Treaty, summarizes its main provisions as follows:

> (1) The creation of new organs: a General Assembly, Coordination Committee, and a Conference;
> (2) Transfer of BIRPI from supervision by the Swiss Government to supervision by WIPO;
> (3) Overall coordination of common administrative activities of the Unions and the promotion of intellectual property on a worldwide basis.

It will be noted that adequate provisions have been made to insure preservation of the autonomy of the various Unions including the Paris Union, the latter of which the United States is most interested in (e.g. Art. 6 [3] [g]; Art. 7 [2] [i]; Art. 8 [6]; Art. 11 [1]). Revisions of existing conventions, such as the Paris Industrial Property Convention, will be solely the responsibility of member States of that Convention.

SAFEGUARDS

The Convention has built-in safeguards and a system of checks and balances which furnish safeguards for the integrity and autonomy of the Paris, Berne and other Unions.

Decisions in the Assembly require a majority of two-thirds of the votes cast, except

> (1) In the case of approval of measures concerning the administration of any other international agreements designed to promote the protection of intellectual property provided for in Article 4 (iii) (for example, if the question came up to assure administration of the Universal Copyright Convention), a majority of three-fourths of the votes cast would be required; and
>
> (2) The approval of any agreement with the Union Nations would require a majority of nine-tenths of the votes cast.

Decisions of the Conference would generally be by a majority of two-thirds of the votes cast and of the Coordination Committee by a simple majority of the votes cast.

The General Assembly would meet every three years in ordinary session, the Conference during the same period and place as the Assembly on convocation by the Director General, and the Coordination Committee every year.

WIPO, accordingly, would have a greater flexibility in this shrinking world of rapid communication, transportation and change. Thus, it would meet more frequently and be in a better position to keep abreast of changes in the intellectual property field and to consider and counteract trends which may be regarded as harmful or inimical. WIPO will be able to move much more rapidly as compared to the Unions in the past. In the 85-year history of the Paris Union, there have been only six Diplomatic Conferences called to consider modifications at intervals ranging from nine to 24 years (1900, 1911, 1925, 1934, 1958 and 1967).

A unique provision of WIPO (Art. 21 [2] [a]) is that member States of any of the Unions, which have not become party to the Convention when it enters into force, have the option on written notice to this effect to the Director General to exercise, if they so wish, the same rights as if they had become party to the Convention for five years from the date of its entry into force. Such States will be deemed members of the General Assembly and the Conference until expiration of the five-year period. On January 30, 1968 Cuba gave notice to BIRPI that it was availing itself of this provision.

Opposition to WIPO

Those who object to WIPO express concern that it would set up a large bureaucracy; that the voice and influence of the private sector of such patent associations as International Association for the Protection

of Industrial Property (AIPPI), Interamerican Association of Industrial Property (ASIPI), International Federation of Patent Agents (FICPI) and Union of European Patent Agents (UEPA), would be lessened in the evolution and progress of the international protection of intellectual property. They fear greater, not less, government involvement, to the exclusion of the private sector in international intellectual property matters. They bring up the matter of cost. Also, that the United States could be outvoted and its influence submerged; also that the United States could be "hooked" into other treaties like the proposed Patent Cooperation Treaty (PCT).

A reading of the text of the WIPO Treaty and Report of the Work of Main Committee V will establish that these fears and concerns are unfounded and have no substantial basis. There is nothing in the Treaty which is inimical to the best interest of the governments of the United States and the rest of the free world or to their private sectors. There is every reason to expect that the relationship and cooperation between BIRPI and the private sector, such as AIPPI, will be stronger under WIPO than before. If costs go up, and should there be more employees, this will be under the careful supervision and scrutiny of the various organs and Unions and no doubt will reflect requirements for a useful and beneficial purpose and function.

The United States will not be outvoted any more under WIPO than it can be under the Paris Union and probably less so. Some 80 countries, 50 of which may be regarded as developing countries, and many of widely divergent ideologies, have cooperated well under the Paris Union. An example of the growing interest in intellectual property cooperation is the joining in the past five years by 27 countries, most of them developing countries, of the Paris Union. There is every reason to believe that there will be even greater cooperation under WIPO, as new and developing countries and others learn about the benefits to be derived from protecting the results of man's creativity.

Conclusion

On balance, and viewed in its entirety, WIPO would help to strengthen the cause of preserving the rights in intellectual property, rather than harm or weaken it. It would enlighten developing countries about the important and economic benefits related to, and derived from, intellectual property protection.

In encouraging creative activity by promoting the protection of the

results of such creativity and by making known the role of such protection in the well-being of mankind, WIPO can play an important part in the economic growth and development, not only of the United States, but of all nations. It can, therefore, be anticipated that the nations of the world (and the private sector interested in the cause of intellectual property), in continuing the spirit of international cooperation which was so manifest at Stockholm, will join hands, not only to bring WIPO into force, but to nurture it to full potential.

By making available student papers, students will receive an incentive and our readers will appreciate the evidence of scholarly development in the fields of interest. These papers are carefully reviewed by the Editorial Committee and other specialists, and helpful suggestions are made to the students as part of the educational function of *IDEA*. The Research Institute invites educational and research institutions to submit informative student manuscripts on the patent, trademark, copyright, and related systems.

Patentability—Rule of Doubt

BENJAMIN F. LAMBERT*

BACKGROUND

THE PATENT OFFICE WAS ESTABLISHED to administer the patent laws enacted by Congress in accordance with Article I, Section 8 of the Constitution. It examines applications for patents to ascertain if the applicants are entitled to patents under the law, and grants the patents when they are so entitled. Where there is a clear-cut demonstration of invention, a patent will eventually issue and its ultimate test of validity will be decided by the courts when and if the patent becomes involved in an infringement suit. On the other hand, where the applicant clearly fails to show the existence of a patentable invention,

* The author, while a student, submitted this paper in partial fulfillment for the Degree of Juris Doctor at Seton Hall University School of Law, June 1968. Mr. Lambert is presently Patent Agent for Merck & Co., Inc., Rahway, New Jersey.

the Patent Office will deny the applicant a patent. The applicant may then either accept the decision of the Patent Office or he may have the decision reviewed as provided in the Patent Act. There is an area, however, where the Patent Office is convinced neither of the patentability nor of the unpatentability of a claimed invention, that is, where the Office is doubtful whether or not a patentable invention has been disclosed by the applicant. The procedure which the Patent Office has chosen to follow in handling doubtful cases has led to a doctrine which has come to be known as the "Rule of Doubt."

The rule of the Patent Office is, simply stated, where there is a reasonable doubt as to whether a patentable invention exists, the doubt should be resolved in favor of the applicant for a patent.[1] From an early date there has been an Office disposition to avoid casting any cloud on a patent.[2] Patent Examiners, in allowing a claim, may not state that they are doing so under the rule of doubt, since such a statement would cast a cloud upon the validity of the resulting patent.[3] The appellate tribunals may, however, and frequently do express doubt.[4]

Under our present patent practice a party seeking a patent who has been unsuccessful in the Patent Office may choose one of two routes for appeal of an adverse Patent Office decision. He may appeal to the U.S. Court of Customs and Patent Appeals[5] and from there to the U.S. Supreme Court by writ of *certiorari*, or he may bring a civil action in the U.S. District Court for the District of Columbia.[6] Appeals from the U.S. District Court may be made to the U.S. Court of Appeals and from there to the U.S. Supreme Court.

Where the question of doubtful invention arises in the U.S.C.C.P.A. all doubt is resolved in favor of the applicant.[7] The Court of Appeals, however, resolves doubt as to patentability in favor of the correctness of administrative and judicial action.[8] The Court of Appeals, therefore, would reverse an adverse ruling in the Patent Office only where it could be shown that the administrative act of the Patent Office could

---

[1] National Lead Co. v. Kingsland, Com'r. of Patents, 74 F. Supp. 985; 76 *USPQ* 174 (D.D.C. 1948).

[2] Morse v. Clark, 1872 C. D. 58; 1 O. G. 275.

[3] *Ex Parte* Overstrom, 1903 C. D. 263; 105 O. G. 1531.

[4] McCrady, *Patent Office Practice*, § 118 (4th Ed. 1959).

[5] 35 U.S.C. 141 (1965).

[6] 35 U.S.C 145 (1965).

[7] *In re* Kirby, 109 F. 2d. 786; 27 C.C.P.A. 919 (1940).

[8] General Motors Corp. v. Coe, Com'r. of Patents; 120 F. 2d. 736; 74 App. D.C. 189 (1941).

be overcome by clear and convincing evidence.[9] A party, therefore, by judicial selection of a route for appeal, may chart the course of an invention of doubtful patentability.

Origin of the Rule

The rule of doubt is believed to have originated in a written recommendation made by Attorney General William Wirt in 1827.[10] In an application for a patent for glass furniture for beer and cider pumps, the question arose as to whether the mere substitution of one material for another was an invention within the meaning of the patent law. The then Attorney General, in a letter to the then Secretary of State, recommended that:

> In every case of doubt . . . it would seem to be more congenial with the policy of the law to afford the citizen an opportunity of trying the validity of his right by issuing the patent.

Application of the Rule in the Patent Office

As the result of a series of decisions, the recommendation of the Attorney General gradually became the rule of the Patent Office. In an 1870 decision involving an application for an improvement in a heat-retaining valve where it was shown that the applicant's alleged invention differed from the prior art in matters of form and construction involving no change in the mode of operation, Commissioner Fisher, in reversing a decision of the Examiners-in-Chief, declared that the applicant had presented a prima facie case of superior utility for his device and a decided difference in utility may well impart a difference in principle. "At all events, the applicant has presented a case in which he is fairly entitled to the benefit of the doubt."[11] In an 1875 decision, Commissioner Thacher reversed the decision of the Board of Examiners-in-Chief involving an application for a hollow metal coffin handle having its ends inserted into rings on bars in the casket and then indented into the rings and attached by inserting plugs. The application, although found to be an improvement both in

---

[9] Caille v. Kingsland, Com'r. of Patents; 73 F. Supp. 921; 75 *USPQ* 338 (D.D.C. 1947).

[10] 2. Op. Atty. Gen. 52; 4 June 1827 [a letter to the Secretary of State from the Attorney General].

[11] *Ex parte* Tuttle; 1870 C. D. 3.

point of economy and security, was rejected as an application of well-known mechanical expedients to an old device. The Commissioner declared that the specification set forth the state of the art and since it was not possible to mislead the public thereby, the benefit of the doubt raised by the case should be given to the applicant.[12] In a decision concerning an application for a patent for a purse attachment to gloves the Commissioner declared that the advantages which flow from the differences between the alleged invention and the prior art were clear. "I cannot say with certainty that invention is not involved in these differences. I resolve the doubt in favor of the invention."[13]

By 1906 the doctrine had become firmly established as the rule of the Patent Office. In a decision concerning an application for a patent for an improvement in lighting systems which had been rejected as a combination of old devices obvious to one skilled in the art, Judge Shephard declared that:

> . . . in the case of ordinary doubt, the policy of the patent system, as customarily maintained in the Patent Office, has been to give the applicant the benefit thereof, because no absolute right of property is conferred by the grant of the patent. The patentee is merely put in a position to assert his prima facie right against infringers who may, in their defense, raise the question of the validity of the patent.[14]

During the formative period of the doctrine, the courts were prone to sustain the validity of an issued patent. Commissioner Leggett, in commenting on Patent Office practice, said that the better policy for the Office to follow would be to stay clearly within the law as expressed by legislative acts and the uniform court decisions.

> Because in a single case a court will go to the extreme limit of interpretation to sustain a patent, [this] is no reason for issuing another patent that would require a like action.[15]

Congress and the courts interpreted the Constitutional grant of power as intending to encourage inventors. They took a liberal attitude toward inventors and parties who were willing to risk capital in an attempt to make inventions available to the public.[16] Thus the Patent Office was justified in allowing claims which appeared capable of withstanding scrutiny by the courts.

The rationale behind the doctrine was that patents are often

---

[12] *Ex parte* Ray, 1875 C. D. 10; 7 O. G. 40 (1874).

[13] *Ex parte* Fanshawe, 1891 C. D. 203; 57 O. G. 1127.

[14] *In re* Thomson, 26 App. D. C. 419; 1906 C. D. 566.

[15] *Ex parte* McCormick, 1871 C. D. 246.

[16] Lutz, "The Constitution v. The Supreme Court, re: Patents for Invention," *Pittsburgh Law Review* (1952), p. 449.

granted with a view toward leaving open, to be decided by the courts, questions which the Patent Office does not deem it proper to adjudicate against the applicant by withholding the patent.[17] The rule of doubt tends to justify the fact that the level of invention required in the Patent Office is lower than that required by the courts in infringement suits. There is good reason why it should be lower because, in the absence of objective criteria as to what constitutes invention, the Patent Office is justified in allowing any claim which seems to have a likelihood of being upheld in court.[18]

Development of the Rule in the Court of Appeals, District of Columbia

The first court to exercise jurisdiction over appeals from the Patent Office was the Court of Appeals for the District of Columbia.[19] It appears from some of the early decisions that the Court of Appeals resolved doubt against patentability and in favor of administrative correctness.[20] The case of *In re* Barratt involved an appeal from the decision of the Commissioner of Patents rejecting the application of *Barratt* for a patent for an alleged improvement in the construction of needle cylinders for knitting-machines. The court concluded that since all of the tribunals of the Patent Office have decided against the applicant on the ground that his improvement is merely the result of mechanical ingenuity . . . it would hesitate to reverse the concurrent decision of all the tribunals of the Patent Office, which it thought should not be done except in a very close case. The court then affirmed the Commissioner's decision. In *In re Smith* the court, in affirming the Patent Office rejection of an application drawn to an improvement in a stocking-supporter, also concluded that where patentable novelty has been denied by all of the ". . . expert tribunals of the Patent Office . . . ," the applicant must make out a very clear case of invention. This is but another application of the same principle that governs in those cases where, in the case of a patent which has been regularly issued, all doubt in respect of invention is resolved in favor of the patentee. The decision by the Court of Appeals to uphold the administrative cor-

[17] Andrews v. Hovey, 16 Fed. 387; 1884 C. D. 129; C.C.S.D. Iowa (1883).

[18] *Supra,* note 4.

[19] For review of Patent Office decisions prior to 1926 see the statement of Commissioner Robertson, Hearings before Senate Committee on Patents on S. 4812, December 21, 1926, 69th Cong. 2d Sess.

[20] Barratt v. Seymour, Com'r. of Patents, 1897 C. D. 506; 79 O. G. 2021 (D. C. Cir.). Smith v. Duell, Com'r. of Patents, 1899 C.D. 313; 87 O. G. 893 (D. C. Cir.).

rectness seemed to be based on the denial of patentability by all the "expert tribunals of the Patent Office."[21]

In a later decision, the court said, while reversing the decision of the Commissioner who had rejected the applicant's application for a patent for a device for breaking and transporting magnetic products:

> We think it, at least, a doubtful question whether appellant's discovery is not patentable, and in such cases it has been the policy of this court to resolve the doubt in favor of the applicants.[22]

In the *Thomson* case,[23] which was decided in 1906, the court cited *ex parte Fanshawe*[24] and concluded that in the case of ordinary doubt, the policy of the patent system, as it has customarily been maintained in the Patent Office, has been to give the applicant the benefit thereof.

> Entertaining such a doubt in this case, we think it just, and in accordance with precedent, that the applicant's demonstrated success in producing an apparatus of great utility, ought to resolve that doubt in favor of his claim.

By 1928, however, the rule had become firmly established in the Court of Appeals.[25] In the *Coykendall* case [26] the court, in holding an invention consisting of a system of marine propulsion particularly adapted for boats in which the capability of quick maneuvering was essential, said that "it is the established rule in this court to resolve the doubt in favor of the Applicant."

Carbide & Carbon Chemicals Corp. et al. v. *Coe*[27] was decided in 1938 and in it the Court of Appeals overruled the Patent Office and the District Court for the District of Columbia and held that an invention disclosed in an application for certain new and useful improvements in food packages was patentable. The court once again invoked the rule of doubt and concluded that "if obviousness is doubtful, the doubt may be resolved by the satisfaction of a need which art, long knowing, had failed to satisfy." The case is, perhaps, of more importance because of the strong dissenting opinion written by Justice Edgerton which was, in all probability, the impetus which ultimately led the Court of Appeals to change its rule. Judge Edgerton

---

[21] Beswick v. Duell, Com'r. of Patents, 1900 C. D. 294; 91 O. G. 1436 (D. C. Cir.).

[22] *In re* Eastwood, 1909 C. D. 418 (D. C. Cir.).

[23] *Supra* note 14.

[24] *Supra* note 13.

[25] *In re* Glafcke, 277 Fed. 603; 51 App. D.C. 204 (1922). *In re* Davidson, 12 F. 2d. 814; 56 App. D.C. 279 (1926). Application of Drew, 4 F. 2d. 958; 55 App. D. C. 291 (1925).

[26] *In re* Coykendall, 29 F. 2d. 868; 58 App. D.C. 280 (1928).

[27] Carbide and Carbon Chemicals Corp. *et al.* v. Coe; 69 App. D.C. 372; 40 *USPQ* 141 (1938).

concluded that there was no invention and that weight should be given to the "presumption of administrative correctness." In arguing for the application of such a rule, he pointed out that a patent regularly issued is presumed to be valid until the presumption of validity has been overcome by convincing evidence of error.[28] The presumption of validity applies regardless of the nature of the attack upon the patent, i.e., whether the issue is of patentable novelty or invention.[29] The Patent Office is no more likely to err when it rejects an application for a patent than when it grants one, and "The judicial function is exhausted when there is found to be a rational basis for the conclusions approved by the administrative body."[30] The line of cases which hold that doubt as to the validity of rejected claims should be resolved, on appeal, in favor of the applicant in effect presume that the Patent Office is wrong and that one who demands a legal monopoly is entitled to it.[31]

Justice Edgerton, in writing the opinion of the court in *Abbot et al.* v. *Coe* made his dissent in *Carbide & Carbon Chemicals* the rule of the Court of Appeals. The court affirmed the District Court for the District of Columbia which had upheld the Patent Office rejection of certain claims in the appellant's application for a patent on improvements in a machine for winding yarn on the ground of lack of invention. The court said that "while the judgment of Patent Office officials is not absolutely binding on the courts, it is entitled to great weight, and is to be overcome by clear proof of mistake."[32] The question which the court decided there was not whether, in its opinion, there was invention, but whether the finding that there was none was consistent with the evidence.

That Justice Edgerton's dissent in *Carbide & Carbon Chemicals* is now the rule of the Court of Appeals has been shown in a series of cases which have resolved doubt in favor of the correctness of administrative action.[33] The present attitude of the court was revealed in a recent case, *Reynolds* v. *Aghnides*,[34] where the applicant, who was

---

[28] Radio Corp. of America *et al.* v. Radio Engineering Laboratories, Inc.; 293 U.S. 1; 55 S. Ct. 928 (1934).

[29] Gulf Smokeless Coal Co. v. Sutton, Steele & Steele, 35 F. 2d. 433; 3 *USPQ* 82 (4th Cir. 1929).

[30] Mississippi Valley Barge Co. v. United States *et al.*, 292 U.S. 282; 54 S. Ct. 692 (1934).

[31] *Supra* note 27.

[32] Abbot *el al.* v. Coe, 109 F. 2d. 449; 43 *USPQ* 267 (D.C. Cir. 1939).

[33] *Supra* note 8.

[34] Reynolds v. Aghnides, 356 F. 2d. 367; 148 *USPQ* 245 (D.C. Cir. 1966).

denied a patent by the Patent Office petitioned the District Court, under 35 U.S.C. 145, to authorize the issuance of the patent by the Commissioner. The District Court found that some doubt still existed as to the utility of the claimed invention, but resolved the doubt in favor of the applicant citing the opinion of the court in *Application of Nurkiewicz*[35] as its authority.[36] On appeal, the Circuit Court of Appeals reversed the trial court and in so doing ruled that

> whatever may be the rule in patent review proceeding before the U.S. Court of Customs and Patent Appeals, in trials *de novo* under 35 U.S.C. 145 in the District Court "doubt (as to patentability) is to be resolved" not in favor of the applicant but in favor of the correctness of administrative action.[37]

Application of the Rule in the C.C.P.A. and the District Court for the District of Columbia

In 1927 jurisdiction over *ex parte* appeals from the Patent Office was taken from the Court of Appeals, District of Columbia and given to the Court of Customs and Patent Appeals, and, like the District Court for the District of Columbia, the C.C.P.A. has consistently from its inception resolved doubt as to patentability in favor of the applicant for a patent,[38] as the Court of Appeals did at the time when it made the first judicial determination of patentability.[39]

Although some of the early decisions in the District Court, District of Columbia resolved doubt in favor of the applicant in line with the rule of the Patent Office, as early as 1948 the continued application of the rule in the District Court was questioned by the court in *National Lead Co. v. Kingsland.*[40] Justice Holtzoff, speaking for the court, said:

> It is sometimes said that as a matter of law if there is a reasonable doubt as to whether invention exists, the doubt should be resolved in favor of the applicant for patent. This is the rule of the Patent Office. There are older cases in this jurisdiction which enunciate the same doctrine as a guide for this court. It is doubtful, however, whether this view still prevails.

The court went on to decide the issue on the basis of the correctness of

---

[35] Application of Nurkiewicz, 338 F. 2d. 1020, 143 *USPQ* 421 (C.C.P.A. 1964).

[36] Aghnides v. Reynolds, 241 F. Supp. 280; 145 *USPQ* 411 (D.C. Cir. 1965).

[37] *Supra* note 34.

[38] *In re* Kirby, 109 F. 2d. 27; C.C.P.A. 919 (1940); *In re* Hirchenrider, 117 F. 2d. 261; 28 C.C.P.A. 876 (1941); *In re* Bencker, 96 F. 2d. 326; 25 C.C.P.A. 1097 (1938).

[39] Railex Corp. v. Joseph Guss & Sons, Inc.; 256 F. Supp. 994; 150 *USPQ* 493 D.C. Cir. (1966), note 1 at 492.

[40] *Supra* note 1.

the Patent Office action. The District Court, however, in *Aghnides* v. *Reynolds*[41] which was decided in 1965, citing a recent decision by the C.C.P.A.,[42] resolved doubt in favor of the applicant. The Court of Appeals overruled this decision[43] and decided the issue on the basis of the correctness of administrative action. In a later case, however,[44] the District Court, citing *Reynolds* v. *Aghnides,* announced that the rule of law in its jurisdiction as related to the resolution of doubt was that doubt was to be resolved "in favor of the presumption of administrative correctness which is accorded to the Patent Office decision to grant or deny the patent or application in suit."

Present Status of the Rule

In the *Hofstetter* case[45] which was decided by the C.C.P.A. in June 1966, doubt as to patentability was resolved in favor of the applicant in line with the past application of the rule by this court. The Hofstetter application was directed toward an improvement over prior art methods and apparatus for blow-molding of plastic containers. The issue presented to the court was whether the subject matter of the appealed claims was obvious within the meaning of 35 U.S.C. 103. The Board of Appeals affirmed the Examiner's rejection based on the combined teachings of the prior art. In reversing the Board of Appeals the court concluded that it was doubtful that the invention in question would have been obvious to one of ordinary skill in the art from the teachings of record without employing hindsight reasoning and that it was proper that doubt should be resolved in favor of applicants so as not to deny them patents to which they may become entitled through the happening of later events. Among such later events the court included commercial success, unexpected utility and development of competing devices.[46]

The court felt obliged to defend its position on the continued application of the rule. It noted the difference in the law as applied in the Court of Appeals, District of Columbia, but nevertheless concluded that the rule of doubt was a sound rule which made for a better and fairer operation of the patent system.[47]

---

41 Aghnides v. Reynolds, 241 F. Supp. 280; 145 *USPQ* 411 (D.C. 1965).
42 *Supra* note 35.
43 *Supra* note 34.
44 *Supra* note 39.
45 *In re* Hofstetter, 53 C.C.P.A. 1545; 150 *USPQ* 105 (1966).
46 Brenner v. Hofstetter, *cert. granted;* 87 S. Ct. 1304 (1967).
47 *Supra* note 45.

In the October 1966 term, the Supreme Court of the United States granted a writ of *certiorari* in *Brenner* v. *Hofstetter*.[48] The petition for the writ sought to place the burden of establishing entitlement to the legal monopoly granted by a patent, that is the overcoming of all doubts, upon the applicant for such patent and maintained that the primary responsibility for sifting out unpatentable materials was in the Patent Office. The brief in opposition, however, maintained that the couching of the decision of the C.C.P.A. in terms of a rule of doubt was merely a matter of semantics in that the Court was merely attempting to express the thought process leading to its ultimate decision.[49] Such an argument is at best a weak one in view of the long history of the application of the rule in the courts. The Supreme Court, however, after granting *certiorari*, vacated the judgment and remanded the case to the C.C.P.A. with directions to dismiss the appeal to the Court as moot. The application involved was abandoned by the applicant.[50].

The Patent Office has recently abandoned its use of the rule of doubt in deciding questions of patentability.[51] The present position of the Office is not to allow patents on applications of doubtful validity. This leaves the C.C.P.A. as the only reviewing body which still adheres to the rule.

The rationale behind the continued application of the rule by the C.C.P.A. seems to be that since factors taken into account in determining patentability, such as obviousness and utility, are often not known when the application is being prosecuted in the Patent Office but may be developed at some later date, even after issuance of the patent, it is better to resolve doubt in favor of the applicant rather than deny him a patent, when later events may show that he was entitled to patent protection.[52]

It would appear that, where an applicant for a patent has contributed something to the art, he should be entitled to protection under the patent system and where the contribution is of doubtful patentability, such doubt should be resolved in favor of the applicant.[53]

The C.C.P.A. places the burden of proving non-patentability on the

---

[48] *Supra* note 46.

[49] *Patent Law Development* 103 (1967).

[50] Brenner v. Hofstetter, 155 *USPQ* 289 (Sup. Ct. 1967) [Editor's Note].

[51] Brenner, "Patent Office Activities During Fiscal Year 1966—Outlook for Fiscal Year 1967," 48 *JPOS* 475 (1966).

[52] *Supra* note 45.

[53] *In re* Hirchenrider, 117 F. 2d. 261 (C.C.P.A. 1941).

Patent Office[54] and rightly so, since under our system of patent law a person is entitled to a patent unless it can be shown that he is not so entitled.[55] Although not expressly provided for until the Patent Act of 1942, this duty has been upon the Patent Office since the enactment of the Patent Act of 1836 which established the Patent Office and reinstated the examination system which had been eliminated by the provisions of the Act of 1793.[56] The applicant must appeal to the C.C.P.A. on the basis of the evidence on record before the Office[57] whereas an appeal before the District Court is deemed a trial of the issues *de novo* and new evidence can be introduced.[58] Hence, the conclusion by the C.C.P.A. that in doubtful cases it would be fairer to give the applicant the benefit of the doubt.[59]

The abandoning of the rule by the Patent Office has weakened the position of the C.C.P.A. somewhat. Since applications of doubtful patentability will no longer be allowed by the Office, the question of resolving doubt will arise not in the Patent Office but in the C.C.P.A. which will then find itself in the position of reviewing Patent Office decisions not on the basis of the record but on the basis of their own conclusions as to the patentability of a particular invention.

Conclusion

There will always be borderline cases on which the Patent Office must render a decision, whether or not such doubt is expressed and made a part of the record. Because the Patent Office is in the best position to decide whether an applicant has described a patentable invention, the better rule to follow, in general, appears to be to give the decision of the Office great weight on appeal.

Where invention is in doubt, the doubt may be resolved by a determination by the Patent Office that the invention in question satisfies a need which the art up to that time was unable to satisfy, and that the inventor of such invention is, therefore, entitled to a patent.[60] Since a patent which has issued through regular channels is presumed

---

[54] *In re* Magat, 240 F. 2d. 351; 112 *USPQ* 317 (C.C.P.A. 1957).

[55] 35 U.S.C. 102 (1965).

[56] Deller's, *Walker on Patents,* Section 12 (2nd Edition, 1964).

[57] 35 U.S.C. 144 (1965).

[58] *Supra* note 6.

[59] *Supra* note 45.

[60] Paramount Publix Corp. v. American Tri-Ergon Corp., 294 U.S. 464; 71 F. 2d. 153 (2d Cir. 1934).

to be valid until proven otherwise,[61] the Patent Office is no more likely to err when it rejects an application for a patent than when it grants a patent. Therefore, since we are disposed to give great weight to the Patent Office's decision to grant a patent, we should be equally disposed to give great weight to a Patent Office decision not to grant a patent.

The Court of Appeals for the District of Columbia has held on occasion that the action of the Patent Office in rejecting an application is likewise supported by a strong presumption of administrative correctness, which should not be upset unless it is clearly shown to be wrong.[62] The Court of Customs and Patent Appeals, which now has jurisdiction of appeals from the Patent Office, has held that when "two tribunals of the Patent Office have concurred in holding that the claims . . . lack invention" and where the art is technical, the decision of the Board of Appeals should not be upset unless clearly overcome by convincing evidence of error.[63] Since the Patent Office is preeminently qualified to solve problems involving the question of patentability and has the equipment needed for deciding questions of a technical character, it follows that the decision of the Patent Office should be entitled to great weight.

Where applications are considered by the Patent Office in interference proceedings and an award of priority is given to one of the parties, and a suit is brought by the unsuccessful party, it is generally held that the grant and rejection by the Patent Office are accepted by the courts as correct unless shown to be "clearly wrong."[64] In *Dowling* v. *Jones*[65] Judge Learned Hand said "The findings of the Patent Office must prevail unless we cannot avoid an opposite conclusion." Where an application not in interference is rejected by the Patent Office, there is no reason in law why the same presumption of correctness should not apply on appeal to either the C.C.P.A. or the District Court, District of Columbia.

Appeals from the Patent Office in interference suits generally turn on priority of invention or reduction to practice, which are questions of fact.[66] Patentable invention is sometimes called a question of fact, sometimes a question of mixed fact and law, and sometimes a conclusion of law, since the answer depends partly on matters of pure fact

[61] 35 U.S.C. 282 (1965).

[62] *Supra* note 27.

[63] *In re* Alden, 65 F 2d. 136; 17 *USPQ* 465 (C.C.P.A. 1933).

[64] Morgan v. Daniels, 153 U.S. 120; 14 S. Ct. 772 (1894); C. F. Bayer v. Rice, 75 F. 2d. 238; 64 App. D.C. 107 (1934).

[65] Dowling v. Jones, 67 F. 2d. 537; 19 *USPQ* 277 (2d Cir. 1933).

[66] Kurtz v. Belle Hat Lining Co., Inc., 280 F. 277 (2d Cir. 1922).

with regard to the prior art, and partly on measuring such facts against the concept of invention.[67] There is nothing about invention which should place it outside the general rule that the Patent Office is presumed to be right. Usually a distinct science or technical speciality is involved in applications before the Office. Expertness in the special area is a distinct advantage and the Patent Office is better equipped to decide technical questions of this character.[68]

It is submitted that the abandonment of the rule of doubt by the Patent Office is an unfortunate development in patent prosecution. This action was probably an attempt by the Office to fall in step with the recent decisions of the Supreme Court which indicate that the Patent Office tends to be too liberal rather than too strict in granting patents. In spite of the presumption of administrative correctness, the Supreme Court has frequently overturned, for lack of invention and for other reasons, the decision of the Patent Office to allow a claim as patentable. In recent years the Court has taken a more critical attitude toward the validity of patents and has held invalid many of the patents brought before it.[69]

As stated by the C.C.P.A., the rule of doubt is a "sound rule which makes for a better and fairer operation of the patent system."[70] However, since every patent is presumed valid[71] the validity of a patent should not be made to depend upon the resolution of doubt in the minds of a court which is remote from the prosecution of the application. Since this presumption of validity is based upon the correctness of the Patent Office action, it seems logical to give a presumption of correctness to Patent Office action where the Office rejects an application for patent.

Doubts will certainly continue to arise in the Patent Office and, since the Patent Office is closest to the prosecution of an application and is therefore in the best position to resolve such doubt, the better procedure to follow would be to allow the Patent Office to apply the rule of doubt where applicable but, once having thus been decided, the question of doubt should not be raised on appeal. The appellate tribunals should only determine whether or not the decision of the Patent Office was fairly based upon the evidence in the record and should reverse the Patent Office only upon a clear showing that the Office was in error.

---

[67] *Supra* note 27.

[68] Robertson, Com'r. of Patents v. Cooper, 46 F. 2d. 766; 8 *USPQ* 31 (4th Cir. 1931).

[69] *Supra* note 16.

[70] *Supra* note 45.

[71] *Supra* note 61.

RETROSPECTIONS

This section will include biographies and other reviews of careers, discussion and documentation of events important to the history of inventions and discoveries, and anecdotal or historical material pertaining to judicial opinion and legislation.

An Inventor Reviews Some Experiences**

ROBERT ADLER*

* Dr. Robert Adler is Vice President, Director of Research, Zenith Radio Corporation.

** This speech was delivered by Dr. Adler on the occasion of his acceptance of the Inventor of the Year Award presented to him by The PTC Research Institute at a reception held in his honor on April 25, 1968, in Washington, D. C.

Inventor of the Year Award Address

I FEEL GREATLY HONORED by this award and by the opportunity to talk to you this evening. Frankly, I am also a little concerned; you may have noticed the recent announcement of a new device, a digital display operated by a small computer which integrates the salaries of those present at a meeting over the elapsed time and gives the treasurer an up-to-the-second account of how much the meeting costs. If such a device happens to be keeping track of this meeting, my only hope is a power failure. In any case, I will try to be brief.

It appears to have become traditional for the recipient of this award to give you his biography. I would like to break with this tradition and talk about other things instead. Bits and pieces of my personal history will merely serve to introduce and illustrate those other subjects.

I was born overseas, in Vienna, just before the beginning of World War I, and entered grade school just after that war ended. We had gas lights in class and pretty gas lanterns on the city streets, and I remember very well that elderly gentlemen making the rounds with a long pole, to turn the street lights on every evening. Sometimes it seems to me that it must have been much longer than 50 years ago; it seems such an enormous step from gas lanterns to communications satellites. In my own experience, of course, the difference in time is enhanced by the difference between the leisurely country in which I grew up and the much more dynamic United States. The total span seems fabulous to me.

Parallel to the bewildering advance of technology, there has been a closely related development which many of us have experienced—the

fantastic change in the degree of recognition which our society accords its technologists. Again, this may look larger to me because I am adding change with respect to time and change with respect to country. But right here in the United States the change over the last 25 or 30 years has been spectacular. In 1940, in this country it was not necessarily a good idea to mention a doctorate in physics if you were looking for a job in industry; certainly, there were exceptions, but in general it was more lucrative to be handy with a soldering iron. World War II, radar and the atom bomb changed all that very suddenly, within a few short years.

I am reminded of a conversation I had with my old teacher, Professor Hans Thirring, when I visited him in Austria in 1951. This happened in Kitzbuehl which some of you may know as a ski resort; it's a very pretty place in summer, too. We were walking up a mountain trail and talking about the physics department of the University of Vienna. I asked Professor Thirring about the plans which physics students were making for their future. He answered that about one-third of them would go into industry, in Europe or elsewhere; and perhaps another third would stay at the University. "And what about the last third?" I asked him, thinking of the multiple job offers which science and engineering students back in the States were even then expecting as a matter of course.

Thirring looked at me quizzically and started to laugh. "You really have a short memory! Tell me—when you studied physics in Vienna in the Thirties—did you think you would get a job?"

A tremendous change has taken place, and all of us in the technical professions are benefiting from it. Every once in awhile, perhaps, we should ask ourselves what we have recently accomplished to deserve such good treatment. I want to come back to this later.

Let me now return to the bits and pieces of my biography, and tell you about one of my early inventions.

A number of metals, notably bismuth, increase their electrical resistance in a magnetic field. The effect is called magnetoresistance. When I was a young student it occurred to me that one could use this effect to build an amplifier which, I hoped, would replace the vacuum tube. The idea turned out to be quite impractical, but I did not realize that at the start and was pretty excited about it. Since I had no money to pay a patent attorney, I prepared an application myself, following all instructions to the letter, and ran breathlessly to the Austrian patent office where they put a beautiful time stamp on the receipt. Only then could I tell anyone about it. Only then could I talk

to my superiors at the University and ask permission and space to make some experiments.

Let us now draw a comparison between this story and the history of a significant invention in the United States. As an example, let me choose one in which I participated—the parametric amplifier, which burst upon the scene a little over ten years ago. Different forms of essentially the same idea occurred to three or four different people in different organizations within a very short time; but even though there was violent competition, there was little secrecy. Everyone who worked in the field became acquainted with the work of his competitors. There were research conferences, meetings of all sorts and published papers. In addition, there was that best communications medium of them all, the grapevine. As long-distance phone bills mounted, mysteries dissolved. All of us who were working in the field could work faster, understand better, make fewer mistakes, because of what our competitors were willing to let us know.

I think the statutory one-year grace period for filing after publication which we have in this country is one of the really important advantages we have over other countries. We don't have to write our application first and then race to the Patent Office to get that time stamp before we can communicate our results to our colleagues and get their impartial reactions. I realize—believe me, I do—that there are sometimes other reasons for keeping technical information under your hat. But often enough it's all right to talk, to publish, to argue with your competitors, and technical development is speeded up for all; yet, no one loses his patent rights. That one-year grace period is truly one of our secret weapons.

There can be little doubt that our patent system has worked well. The results are all around us. I don't mean to say that it could not stand a little touching up here or there, but I am not an expert on that subject. Nevertheless, I think we can all agree that the patent system has served its assigned purpose: To promote progress by increasing significantly the probability of financial reward for those who come up with new things—whether it be the individual inventor who invests years of his life, or the giant corporation that risks millions of dollars. Without the patent system and the incentives it provides, many new ideas would never be conceived, and if they were they might remain on paper. I suspect there is little controversy about this among the people in this room.

But let me, just for a minute, be the devil's advocate. Let me suggest that all of us in the technical and patent professions, because we are so close to the matter, might just possibly have an exaggerated idea of

how important our work seems to the rest of the world. Permit me to illustrate what I have in mind by a final piece of my biography—one which, I believe, you will find charming, even though perhaps not unique.

A number of years ago, Mrs. Adler and I went to see relatives in Ohio over the Christmas holidays. I am, compared to some members of my family, an early riser, and so it came about that I was all alone in the living room on Christmas morning when suddenly a visitor turned up. It was my little niece, a lovely blonde, all of five years old at the time. She looked me over, turned on a bright smile, and then her little computer stopped in an unexpected place.

"Uncle Robert—what do you do when you work?"

At that particular time, I happened to be working on low-noise parametric amplifiers. I should have tried to explain them to her, but I was a coward. So I said instead:

"You see that television set—you know, these sets are getting just a little better every year, and there are a number of people working all the time to make these improvements. I am one of those people."

The little girl looked at me, puzzled. Her bright smile disappeared and yielded to a frown. She looked at the television set in the corner—it had been there ever since she could remember, making funny pictures, and it was not getting better every year; in fact, it was fine just as it was. The whole thing did not make sense. She looked back and forth several times between me and the set, still puzzled.

Suddenly, her bright smile returned. She looked straight at me and said with great delight:

"Uncle Robert—that's silly!"

And marched off triumphantly.

Never in my whole life have I felt so deflated.

Of course, you know and I know that this is not the whole story. It is by no means all silly. Few of us, probably including my little niece who is a bit older now, would trade our jets for the Toonerville trolley or give up direct dialing, frozen foods or plastics. I hope that some might even wish to keep stereo FM, in which I had a small part, or hang on to the remote control for their television set. But there is a lesson in that little story, a reminder to all of us whose waking hours are spent in the world of technology: Society is supporting us with a generous letter of credit. At the present time we are a favored group. Let us not forget that technology in itself is no more than a splendid toy. To pay our debt to society, we must control and direct technology to make it serve society.

In concluding these remarks, I would like to say a few words about

the organization with which it has been my good fortune to be associated for 26 years, Zenith Radio Corporation. It's a capable and congenial group. The people in engineering, in research, in the patent department and in management, with whom I have worked and from whom I have learned, are too numerous to be mentioned by name; but I think this is a good place to express my appreciation to all of them. In this day and age you don't work alone; my colleagues at Zenith, but also colleagues in other laboratories in industry, government and at universities have helped me a great deal, and I hope that once in awhile I have helped them too. It is in this spirit that I accept the award.

Highlights in the Careers of Other Award Nominees for 1967

As is our custom, we are sharing with our readers the rich information contained in letters we have received nominating candidates for the Inventor of the Year Award. Volumes 9, Number 3; 10, Number 2; and 11, Number 1 contain letters of nomination for Award candidates for previous years.

Background information on Robert Adler, Inventor of the Year for 1967, is contained in his address, "An Inventor Reviews Some Experiences," on page 717 of this issue. Further biographical material on Dr. Adler appears in a note in Volume 11, Number 4.

FOR CONSIDERATION OF INVENTOR OF THE YEAR AWARD the following information is submitted in behalf of Mr. Jack S. Kilby.*

* Willis A. Adcock, Vice President of Texas Instruments Incorporated, Dallas, submitted the above letter of nomination.

A study of Mr. Jack Kilby's career after he received his Master of Science degree in electrical engineering from the University of Wisconsin in 1950, impresses one by his singleness of purpose and coherence of efforts toward the integration of complex circuits.

Jack S. Kilby

His first work in this direction was the incorporation of semiconductor devices with ceramic-base, silk-screened circuits during his years with Centralab Division, Globe-Union (1947-1958). After joining Texas Instruments Incorporated in 1958, Mr. Kilby made the key inventions of monolithic integrated circuits, and subsequently projected these circuits into logic arrays.

Mr. Kilby's invention of the basic integrated circuit has been an invaluable contribution to the people of the Space Age. The merit of this contribution is measured not only by its present value, but also for its future usefulness as it continues to pervade every aspect of our society. To an individual the integrated circuit provides for such simple but valuable devices as hearing aids or artificial human organs; to the government, it provides for computer-guided space programs; and to the future of mankind, applications of integrated circuits appear interminable.

In 1958 the technical climate showed generally receptiveness to electronic advancements, yet Mr. Kilby undertook a seemingly impossible task of extending the application of the transistor and other electronic devices. This was the year that Mr. Kilby, while working for Texas Instruments Incorporated, developed his invention which resulted in the award of three patents: 3,138,743, 3,138,744 and 3,138,-721. These patents cover not only the devices but also the technologies for practically all semiconductor integrated circuits manufactured today. Briefly, the patents include in their coverage:

(1) The incorporation of both active and passive circuit components into a semiconductor body;
(2) Hybrid integrated circuitry with active components formed within the bar and passive components deposited upon it;
(3) Features of integrated diode "AND gates," related devices, and various logic arrangements in microcircuit form.

The monolothic integrated circuits are constructed by a process having several very remarkable features. First, they are constructed by a sequence of processes in such a way that hundreds or even thousands of complete electronic circuits are assembled concurrently; second, they are constructed largely of one material, a single crystal of a semiconductor in the form of a thin wafer about one inch in diameter, upon which hundreds of identical circuits are constructed; third, each

circuit, which may typically consist of many transistors, resistors, capacitors, and a network of metallic interconnections with appropriate insulation, is so small that its structure can only be appreciated through a microscope. For the latter reason, such circuits are sometimes termed "microcircuits." Since silicon is the semiconductor material most commonly used today, the discussion hereafter will be in terms of silicon.

The economy of the process derives mainly from the great number of circuits which can be constructed concurrently by a limited number of simple operations. The precision and small size of the devices derive from the extensive use of photographic methods to define areas acted upon selectively. The ability of the process to incorporate transistors, diodes, and other active elements into the network derives from the use of the substrate of single-crystal silicon; upon this substrate, individual transistors can be constructed in tremendous numbers by a sequence of operations which typically include impurity diffusion and epitaxial growth of new layers of silicon, the areas being defined by photographic masking in conjunction with oxidation and etching.

Important also is the fact that the layer of oxide, which is readily grown on silicon by the action of oxygen and steam, can be dehydrated and converted to a quartz glass film which is an excellent insulator as well as a protective covering for sensitive semiconducting elements.

Mr. Kilby personally made the first working integrated circuits, which were demonstrated to the Department of Defense in 1958 and announced to the industry in 1959. The invention was one giant step, but its application was another. In 1961 Mr. Kilby led a Texas Instruments team to another historic first—the development of the first computer utilizing integrated circuits.

Continuing to exploit his product, Mr. Kilby in 1962 led a Texas Instruments team, in cooperation with a team from Autonetics Division of North American Aviation, to the design of the first military system utilizing integrated circuits, the improved Minuteman Computer (D37B). This system has both linear and digital integrated circuits, a total of eighteen basic circuit types. The missile computer has 2500 integrated circuits comprising over 90 percent of the computer electronics. The recent launching of the Minuteman missile is evidence of the results of this work.

The rate of change in the electronics industry is further evidence of the impact of Mr. Kilby's inventions on the electronic industry. From his basic concepts, other engineers and scientists have been afforded such a new field for expanding devices and technology that today—nine years later—the military, industrial, consumer, and medical mar-

kets have been penetrated in an unprecedented way. Universities have aligned their programs to the needs of these markets as well.

For his pioneer contributions and development work, Mr. Kilby has been recognized by the technical community he serves. The several awards he has received attest to his fine character and the importance of his technological contributions. On February 26, 1965 he received the award for "outstanding achievement in the field of electrical engineering" from the Dallas Section, Institute of Electrical and Electronic Engineers. In March 1966 the elevation to the rank of Fellow of IEEE was awarded. On October 19, 1966, Mr. Kilby was honored as the co-recipient of the Stuart Ballantine Medal by the Franklin Institute, Philadelphia, for his "outstanding work" in the field of engineering. In October 1966 he was also named as the first recipient of the Daedalian Minuteman Electronic Award, and his trophy will be on permanent display in the Smithsonian Institution. This award to Mr. Kilby was for "the most outstanding contribution in the field of electronics." In the spring of 1967 Mr. Kilby was awarded the David Sarnoff Award. This is one of the most distinguished awards in the field of electronics and is bestowed by the IEEE Board of Directors to the individual making the most outstanding contribution to electronics.

Mr. Kilby has continued to provide creative leadership in the advanced areas of integrated circuits. His early concepts of the logic array, dating back more than four years, are now being worked on intensively at Texas Instruments and by nearly all firms active in the field of integrated circuits. The logic array is a dramatic extension of the basic idea of integrated circuits to where one fabricates complete subsystems composed of over 100 logic gates on a single slice of silicon.

Thus, the dream of an inventor, Mr. Jack S. Kilby, is unfolding in a very realistic way—a revolutionary way. The integrated circuit may, in the opinion of many, exceed in importance the invention of the vacuum tube or the transistor. The inventor is not leaving his invention on a pedestal of prestige, but he is continually energizing it as a springboard for today's applications, and indeed for vistas not yet tapped by engineers and scientists. It is indeed a pleasure to nominate Mr. Jack S. Kilby for the 1967 Inventor of the Year Award.

The following article on Mr. Kilby appeared in the September 2, 1966 issue of *Time*.*

---

* Reprinted by permission from the September 2, 1966 issue of *TIME* under the title of "Gulliver-Size Need For Lilliputian Products," Courtesy *TIME*; copyright Time, Inc. 1966.

Medieval theologians who argued for years about the number of angels that could stand on the head of a pin never found a satisfactory answer. Contemporary scientists who are just as doggedly determined to see how much gadgetry they can cram into about the same amount of space have made remarkable progress. On a barely visible chip of silicon as small as one-twentieth of an inch square, they can now produce complex and virtually trouble-free electronic circuits containing more than 80 built-in transistors, diodes, resistors and capacitors.

These tiny devices—called integrated circuits because their components are built as inseparable parts of one solid chip—are already displacing the transistor as the glamour product of the electronics industry. . . . First developed in 1958 by Texas Instruments Engineer Jack Kilby while he was tinkering in the laboratory during a hot summer vacation, integrated circuits (or ICs) did not become generally available until 1962, when design improvements and refinement of production techniques allowed electronics companies to turn out some 60,000 a year. In 1966, the industry will produce 35 million ICs worth $150 million, and even then it will be hard pressed to meet the explosive demands of its customers.

Integrated circuits are becoming one of the basic building blocks of the space age. They are vital to the electronic systems of the Minuteman II and Polaris missiles, the Navy A-7A attack bomber and the supersonic, swing-wing F-111A. They are at work in the radiation measurement system aboard Lunar Orbiter I and will be used in the Apollo Project's lunar excursion module. ICs are used in the new ground-surveillance radar system at the Atlanta airport and are being designed into most new military and commercial computers. Within the last year, the tiny chips have also begun to find their way into consumer products. Some Zenith hearing aids and RCA television sets now use integrated circuits, and General Electric will soon market an integrated-circuit clock radio.

Speed & Reliability. Though creation of the microscopic circuits marks a triumph of miniaturization for an industry that is obsessed with Lilliputian dimensions, the negligible weight and small size of the ICs (more than 9,000 will fit in a thimble) are even less important than their reliability, low cost and speed of operation.

The introduction of integrated circuits, for example, came just in time to rescue electronics engineers from the "tyranny of numbers." As electronic devices grew more complex, requiring hundreds of thousands, and even millions of separate components and interconnections, it became increasingly probable that at any given time they could be disabled by a single faulty part or connection. By the use of pretested ICs, each with scores of virtually indestructible components permanently connected within a solid chip, the probability of failure has been reduced.

ICs have also solved another dilemma for electronics engineers: because electric current travels at the speed of light (about a foot in a billionth of a second), the length of wires or other conductors connecting circuit components and the size of the components themselves are an increasingly important limitation on the speed of circuit operation. For circuits to operate billions of times per second—a requirement in many of the new computers and microwave communications systems—circuit components must be lo-

cated within a tiny fraction of an inch of each other. The microscopic dimensions of integrated circuits not only make such high-speed operations possible but also leave room for the design of even higher-frequency devices.

The sophisticated techniques used to mass-produce integrated circuits have also substantially reduced costs just when the increasing complexity of electronic devices was threatening to price some of them right out of the market. One of today's larger computers may contain 25,000 ICs, and though some of the more complex circuits for military equipment cost as much as $8, simpler ICs are down in price to as little as 35¢ apiece, about the cost of a single transistor used in the same type of circuit.

Three-Layer Circuits. Like the transistor, the integrated circuit depends largely on the unique electrical properties that pure silicon crystals acquire when precise amounts of impurities, such as boron or phosphorus, are added to them. One type of impurity, or "dopant," leaves the silicon with a deficiency of electrons producing what scientists call a *p*-type region in the crystal. Another will provide the crystal with an excess of electrons creating an *n*-type region.

In a transistor, a negative, or *n*, layer of doped silicon is sandwiched between two positive, or *p*, layers—or a *p* layer is put between two *n* layers. Either way, the middle layer acts like the grid in a three-element vacuum tube, which regulates the flow of electrons between incandescent cathode and plate. When a small signal current is fed into the transistor's middle layer, it can control a much larger current flowing through the transistor from one outer layer to the other. When there is no signal, the transistor effectively blocks the passage of current from layer to layer. Thus the transistor can perform the basic function of the vacuum tube: the control and amplification of electric current.

Adjacent dopant-treated layers of silicon, one *n*-type, the other *p*-type, will allow current to pass through in only one direction. Such an arrangement duplicates the properties of a diode, which can change (rectify) alternating current into direct current. Used in another manner, the junction between *p* and *n* layers can be used to store electric current and serve as a capacitor. Silicon itself retards the flow of electrical current and can provide the necessary resistance for a circuit. Thus by the use of the proper combination of dopant-treated layers diffused onto a tiny chip of pure silicon, and by insulating here and connecting there, a complex integrated circuit containing transistors, diodes, capacitors and resistors can be constructed.

Photosensitive Pattern. To begin the ingenious process required to produce ICs, a *p*-type clyindrical crystal of silicon, 2 ft. long and 1¼ in. in diameter, is gradually drawn from a vat of molten silicon. After it cools, it is sliced into thin, half-dollar-size wafers, which are polished to a mirror-like finish, then reheated and exposed to a precisely measured amount of dopant gas. This exposure causes an *n*-type region, known as the epitaxial layer, to grow on one side of the wafer. The wafer is then placed in an oven and exposed to steam, which oxidizes its surface and forms a protective coating.

As soon as the wafer has cooled once more, it is covered with a layer of photosensitive material and exposed to ultraviolet light

projected through a photographic negative. On the negative are hundreds of identical IC patterns, each reproduced from a master pattern 500 times larger. They are projected onto the photosensitive surface of the wafer, which is then dipped in acid that etches the oxide layer away wherever the shadow of the IC pattern has fallen.

Back in an oven, the wafer is exposed to a *p*-type dopant, which diffuses into the silicon only where the protective oxide coating has been etched away. The entire process is then repeated, using a different pattern and an *n*-type dopant. A third pattern serves to produce metallic interconnections between the circuit components formed in the three dopant layers.

After each of the hundreds of ICs has been tested by a machine that automatically subjects it to 36 different electrical tests, the wafer is cut into its hundreds of individual circuits by workers armed with microscopes, diamond-tipped scribers and vacuum-tipped pencils. Each IC is placed in a tiny container to which workers attach gold wires that are used to connect the IC with other circuits or components, and sealed. Before they are shipped to the customer, the ICs are given high- and low-temperature tests, vibration and high-G tests often while automatic instruments check their performance.

Because the resistors and capacitors created in silicon integrated circuits are still not of high enough quality, the ICs are often combined in hybrid devices with tiny resistors and capacitors consisting of alternate thin films of metal and insulator. Though these thin film microcircuits can provide resistors and capacitors of higher performance, they cannot duplicate the functions of transistors or diodes.

Many electronics companies are beginning to use miniaturization techniques that allow them to produce as many as three different circuits on one tiny silicon chip the size of one present IC. Texas Instruments has built an experimental device covering the entire surface of a silicon wafer. It contains more than 200 integrated and interconnected circuits, each made up of a dozen components, all packed into an area the size of half a dollar.

TV & Tax Returns. The sophisticated, practical and low-cost circuitry that will soon be available promises to outrace the fondest dreams of science fictioneers. Integrated circuits will surely be moving farther and farther into space; they will also work their way into more and more of man's life on earth. Worldwide TV networks and auto ignition systems that never wear out are likely to seem mundane indeed next to miniature home computers capable of controlling everything from garage doors and automatic sprinkling systems, to air conditioning and cook stoves—while working out the family tax returns in their spare time.

I WOULD LIKE TO NOMINATE Professor Jay W. Forrester of our Sloan School of Industrial Management for this award.* The Forrester

* The above letter of nomination was submitted by Carl F. Floe, Vice President, Research Administration, Massachusetts Institute of Technology.

Computer Memory Invention has certainly proved to be one of the most significant advances in the computer field.

Jay W. Forrester

The M.I.T. Digital Computer Laboratory was established in 1946 under the direction of Dr. Jay W. Forrester, then a research engineer and now Professor of Industrial Management. The Laboratory drew initial support from the Office of Naval Research to which support was later added by the U.S. Air Force. The Laboratory developed the Whirlwind computer, one of the first high-speed electronic digital computers, for application to science, engineering and experiments for the processing of air defense information.

By 1949, it became clear that the bottleneck in computer design was the internal memory, in which commands for the complex computer operations are stored. Relays and electronic tubes had been found too slow or too bulky and lacked the necessary speed or reliability to satisfy the rigorous requirements of the applications on which Dr. Forrester and his associates were working.

In the middle of 1949, the idea came to Forrester of making a memory system with magnetic cores capable of bistable operation through the use of materials having nearly square hysteresis loops, and electrically exciting them by coincident currents. The cores were to be toroidal (doughnut shaped) in form, and each was to have a magnetic flux which could be set to one direction or the other around the core. The "state" of the core was determined by the direction of the flux in the core, that is whether clockwise or counterclockwise.

Each core was to have a number of wires through it, and the direction of flux could be changed only by passing pulses of current through two of the wires at the same time. A pulse through only one wire at a time would not cause any change. Each core could then store a single "bit" or binary digit of information.

The cores were to be arranged in columns and rows to form planes, and the planes were to be arranged in a three-dimensional stack, so that a large number of cores could be arranged in a small space.

The use of cores for computer memories had been suggested earlier but they did not utilize the features of coincident-current excitation which solved the problem of selecting the desired core.

Memory systems using the cores were built at the M.I.T. Digital Computer Laboratory and were incorporated into successful computers. In the early 1950's, the Laboratory was joined with several other groups to become the M.I.T. Lincoln Laboratory. It was at Lincoln that the first core system—developed earlier at the Digital

Computer Laboratory—was incorporated and successfully operated in the Whirlwind computer.

Further development was done by Dr. Forrester's laboratory in cooperation with others, and a great deal of development work was done by other experimenters. One of the developments was in ceramic cores, which had the advantages of small size and fast operating speed. Improvements in cores have been made continually until some cores are now less than one-fiftieth of an inch in diameter. A single core is barely visible to the naked eye but it has its hole in the middle, through which four wires are passed to form the rows and columns of the memory plane.

The core memory, as it is called, was so successful that almost every large computer now uses it. In the opinion of competent authorities, it was the core memory that broke the bottleneck to make the modern computer possible. So fast has been the expansions of the computer industry that the demand for cores has exceeded all estimates, and the numbers of cores now being made run into billions per year.

In keeping with the standard policy of the Department of Defense, a royalty-free license was granted to the United States government, whereby the government could make or purchase memory systems without payment of any royalty. This form of license insures that the government will have free access to inventions developed with government funds, while the inventor and the university have the right to participate in income from commercial uses of the invention.

Proceeds from the patent, totaling approximately $16,000,000 to date, have been used by M.I.T. for enrichment and expansion of its educational program.

Professor Jay W. Forrester has been a member of the Faculty of M.I.T.'s Alfred P. Sloan School of Industrial Management since 1956. He is applying his earlier work in digital computers and servomechanisms to developing the field of "industrial dynamics," a new approach to the design of corporate policy based on the feedback system character of the industrial enterprise.

Professor Forrester's book, *Industrial Dynamics,* (M.I.T. Press, 1961), was chosen by the McKinsey Foundation in 1961-62 as one of the five books most important to managers.

WE WOULD LIKE TO PLACE IN NOMINATION for the 1967 Inventor of the Year Award the name of Arnold F. Kopaska of Guthrie Center,

Iowa.* A resume of his endeavors along with copies of his several patents are enclosed herewith. We are also enclosing two newspaper articles about Mr. Kopaska which were published in the Des Moines Tribune** on Monday, August 2, 1965, and on Monday, October 30, 1967:

Arnold F. Kopaska

Every so often Arnold Kopaska discovers that a farming operation could be made simpler if only there were some modification in existing farm machinery.

For six months to a year, he thinks about it and by then he has a pretty good idea what should be done about it.

His next step is to repair to his workshop in the garage of his farm home near Guthrie Center and make a device that conforms to his specifications.

He then patents the thing, sells it to manufacturers and sits back and collects royalties.

Take his "minimum tillage" attachment, for instance.

A spring-tooth harrow mounted in front of a planter, it conditions the soil as you plant and eliminates discing.

Because it conditions the soil as you plant, it allows one unit to do what formerly was accomplished by two units.

2,000 Sold

Although a patent still is pending, the Emmert Manufacturing Co. of Audubon already has gone into production and 2,000 of these attachments have been sold this year.

Another of Kopaska's devices is an easier and safer method of transporting a harrow from place to place.

The innovation, on which a patent was granted in May, consists of a hinge and catch on a vertical arm that eliminates having to pick up the harrow manually.

Kopaska's device leans to the rear so that the rear portion of the harrow section need only be pivoted forward to be engaged.

Momentum then takes over and the arm pivots forward to an upright position, lifting the harrow off the ground.

These are among the latest of Kopaska's inventions but there are others that have been on the market a number of years and that have regularly been earning royalties for their inventor.

500-Acre Farm

Kopaska, who farms 500 acres near Guthrie Center together with his son Larry, doesn't come by his inventive bent with the help of any formal training in agricultural engineering.

In fact, he only has an eighth-grade education.

"Ideas just come to me," he explains simply.

"Then I start building what's in my head but if I should die

---

*The above material was submitted along with his letter of nomination by Donald H. Zarley of Zarley, McKee & Thomte, Des Moines, Iowa.

**Reprinted with permission from the *Des Moines Tribune* under the titles "Iowan's Royalties Have Doubled" and "An Inventor on the Farm," respectively, by Nick Baldwin.

tomorrow nobody would know how to continue because I never make any drawings," he added.

"I think and think about it and by the time I'm ready to build I know clearly what I'm going to do and where every nut and bolt should go," he said.

By this highly personal method, Kopaska has marketed successfully a self-cleaning sickle section, a hydraulic coupler and an improved cultivator that is easier to handle and move from place to place.

24 Plants Licensed

"Twenty-four plants in the United States are licensed to use one or the other of my patents and six of these patents are in production," Kopaska said.

Major companies that are licensed to manufacture and are manufacturing farm machinery with Kopaska-patented improvements include John Deere Manufacturing Co. of Moline, Ill.; Pioneer Hydraulics Co. of Minneapolis; Noble Manufacturing Co. of Sac City, and Standard Engineering Co. of Fort Dodge.

Kopaska, who three years ago claimed royalties totaling a five-figure income, says his revenue from royalties has more than doubled since then.

"I've got a couple of new things that I'm working over in my mind and when I get them completely thought out I'll build them," he said.

* * *

Arnold Kopaska, 57, farms some 600 acres about three miles north of Guthrie Center but his income from farming is small compared to another source.

A successful inventor who owns patents on a number of hydraulically controlled farm devices, he says income from royalties far outstrips his income from the farm.

"Right now there are factories in seven states manufacturing devices on which I hold patents," he said.

Among the firms he named John Deere, the Noble Manufacturing Co. of Sac City, the Robert Herschel Manufacturing Co. of Peoria, Ill., and the Clark Manufacturing Co. of Atherton, Mo.

Kopaska said his income from royalties three years ago was about $50,000 a year and is substantially larger this year.

Best Seller

Bruce McKee, Des Moines patent attorney with the firm of Dick, Zarley, McKee & Thomte, said, "Kopaska is one of the most successful inventors that we have known."

"During the last 12 months these companies have sold $5 million worth of machinery on which I hold patents," Kopaska said.

He said his harrow transport, which uses hydraulic control to lift the hoe off the ground and set it down again, has sold best.

"The Herschel firm of Peoria manufactured 12,000 units the past six months," he said.

Kopaska says his latest invention, a device that makes it possible to mount a six-section rotary hoe on a tractor, is his best yet.

"The Standard Engineering Co. of Fort Dodge is going into production with 300 units in November and they plan to sell about 1,000 by the end of the year," he said.

In this device, as in most of his inventions, Kopaska has harnessed hydraulics to farm machinery.

In the absence of hydraulic operation, each time a rotary hoe is moved from farm yard to field, it has to be hauled to its destination, Kopaska said.

The Guthrie Center farmer hit on the idea of a hydraulically operated attachment to the tractor that would lift the hoe off the ground.

A four-section rotary hoe with hydraulic attachment designed by Kopaska has been on the market a number of years. But how to achieve the same results with a heavier, six-section rotary hoe had him stumped until recently.

Kopaska explained that the problem has been to lift a 2,400-pound rotary hoe without causing the front end of the tractor to rise.

Takes Weight

"Even with the smaller rotary hoe, there was a tendency for the front of the tractor to go up," he said.

The device Kopaska finally developed is a hydraulically operated rear wheel assembly that balances the rotary hoe and takes about a third of the weight from the tractor as the hoe is lifted or lowered.

"I've been working on this ever since 1955 and I've spent thousands of dollars developing it," he said.

He added that "what puzzles me now is that it's so simple that I can't understand why I didn't think of it sooner."

Among other inventions for which he has found a market are a self-cleaning sickle section and a hydraulic coupler, a device used to connect hydraulic implements to tractors.

Early Discouragement

Kopaska said that it wasn't easy to sell his ideas at first—that companies have a tendency to discourage inventions, even good inventions, at first.

"When I first went to a large firm with my idea for a harrow transport, they told me it wasn't practical and now it's the best-selling thing I have," he said.

In addition, Mr. Kopaska has developed a center drive auger which will be in production in 1968 by the Standard Engineering Company of Fort Dodge, Iowa. A rotary hoe transport and another minimum tillage device utilizing a rotor tiller are also presently in production by the Standard Engineering Company of Fort Dodge, Iowa, and the Emmert Manufacturing Company of Audubon, Iowa. A patent is about to issue on the center auger drive invention, and patents are pending on both of the two latter inventions.

I HEREBY NOMINATE Mr. Edwin C. Rinker for the Inventor of the Year Award.*

Mr. Rinker is Vice President and Technical Director in charge of research and engineering for the Sel-Rex Corporation. Mr. Rinker has had a long and fascinating career in the fields of electrochemistry and electroplating. He has served as a consultant to the Manhattan Project at Oak Ridge.

Edwin C. Rinker

The fruits of Mr. Rinker's work are evident from the 157 patents that he holds worldwide, in addition to numerous pending patent applications. In addition, he is the author and co-author of many articles, including, for example, "Solderability of Some Gold Electro-deposits" from the *Journal of American Electroplaters Society,* November, 1965, and "New Plating Process Expands Industrial Use of Gold" from *The Iron Age,* June 25, 1953. A more complete list is available.

Among the many contributions that Mr. Rinker has made to the electroplating field, he is best known for his work in achieving the first commercial process for plating gold in the transistor field. The work of Mr. Rinker and his assistant, Mr. Robert Duva, is described in a recent book by Johannes Fischer and Dennis E. Weimer entitled *Precious Metal Plating* published by Robert Draper Ltd., Teddington, England, in 1964, as follows:

> Acid electrolytes employing gold chloride and hydrochloric acid have been known for many years, but no advantages over cyanide electrolytes were observed—in fact, there are a number of disadvantages, one being the corrosive nature of the electrolyte.
>
> Surprising as it may be, it is only within the last few years that the stability of a solution of gold potassium cyanide down to a pH of 3:1 has been exploited in the electroplating field, by Rinker and Duva. The solutions that they developed give deposits of a wide variety of properties, and are now the most widely used type of electrolyte for gold plating. The discovery of an acid electrolyte was initiated by the need to find a solution which could be used to gold plate printed circuits without harmful effects on the base material, but the scope of application has widened into every aspect of gold plating.

In keeping with the intention of the Inventor of the Year Award, namely "to recognize a relatively unknown dedicated inventor who overcomes obstacles and expends his resources to produce an invention or inventions," I should like to provide the following insight into the

---

* The above letter was sent in by Stanley H. Lieberstein of Sel-Rex Corporation, Nutley, New Jersey.

nature of the above referred-to discovery. For a great many decades, gold plating baths were maintained in an alkaline media. The reason was simple. Elementary chemistry taught that an acid media would give rise to a lethal cyanide evolution of corrosive cyanide gas. The key to overcoming the obstacles resided in the laborious and painstaking efforts by Mr. Rinker and his assistant to finally achieve an electrolytic solution that would function in an acid media and yet not evolve the lethal gas.

Mr. Rinker has been an active member of the American Electroplaters Society for many years and is also a member of the Electrochemical Society and the Institute of Metal Finishing in England.

I AM SUBMITTING THE NAME OF Mr. Herman Bany as a nominee for the Inventor of the Year Award.* Mr. Bany is a retired consulting engineer who spent all but two of his 42 years' service with General Electric in its switchgear business. He was born on May 12, 1896.

Herman Bany

He is a registered professional engineer in Pennsylvania; member of Tau Beta Pi; graduate of Iowa State College in 1918 with a B.S. in Electrical Engineering; Fellow of the Institute of Electrical and Electronics Engineers; member of its Substation Committee from 1948 to 1966 and also served as a member of other groups, on a national basis, within IEEE and other technical societies; author or co-author of, or contributor to, approximately 25 technical papers, articles, or standards, the latter being on a national basis or within General Electric; and, finally, an unusually competent engineer.

His patents are one example of this: 77 U.S. patents were issued to Mr. Bany; 22 of these are joint with another inventor and one with two. Foreign assignments of his patents include many countries where General Electric has licensees or affiliates. These assignments are an indication of the value placed on his patents by engineers in other countries. His penultimate invention was assigned to affiliates or licensees in Argentina, Brazil, Canada, England, France, Germany, Japan, Sweden and Switzerland.

As an application engineer and later, consulting engineer, he as-

* The above nominating letter was submitted by A. E. Anderson of Havertown, Pennsylvania.

sisted other engineers in meeting customers' or operating requirements; selected and approved devices and apparatus (large and small); prepared and issued specifications covering new designs or modifications of existing devices or apparatus; developed various control and protective systems and standards; conducted factory and field tests (some of these systems could only be tested in the field); et cetera. In the case of large and complicated systems which he developed, such as for a 25,000kva frequency changer at the Sparrows Point Plant of Bethlehem Steel, the elementary or schematic diagram was over 30 feet long. Certain features of this installation are covered by one of his patents. He was practically on the production line, readily available to anyone, and not working in a laboratory or some secluded location. Obviously, none of this was conducive to solitude, a vital ingredient for inventing. I can speak from my own experience, since I was closely associated with Mr. Bany for many years. But I am quite certain, as in my own case, that many of his inventions are the result of solitude (and not a product of the firing line) which is often required for creative effort.

Mr. Bany combined inventive ability and excellent knowledge of apparatus, its characteristics and operating requirements. He is one of the pioneers of automatic switchgear and many of his inventions, in their particular field, were forerunners of today's automation, demonstrating that dependable and improved service was possible without requiring manual or attended operation. Reduced cost of operation and improved continuity of service were among his major objectives. Many of these installations were operating in the early 20's and his first patent application was made somewhere in the mid-20's. Consequently, we are dealing in his case with proven accomplishments, some going back 40 years.

His creativity has contributed markedly to major improvements in the use of electric power in virtually every industry. The range of his work was mainly in the field of electric power, as compared, for example, with electronics. His work and creativity were applied to sources of electric power, including prime movers; distribution and transmission systems; industrial plants, including steel mills; urban, interurban and main-line electrification of transportation systems; mines and others. Two of his outstanding contributions apply to the control, protection and other features of partially automatic steam turbine-driven and wind-driven prime movers. His patents include features applying to these two advanced installations. I doubt that it is possible to find another living inventor who has contributed to the same degree of creativity in the field of electric power and specifically

to the automatic category.

Some of the projects on which Mr. Bany worked were very large, requiring their division between different departments and engineers. They could include equipment for a power house, sub-station, steel mill, et cetera. Consequently, no single product can be pointed out. On the other hand, it is probably fair to say that major portions of creativity could be found in the control, protective and regulating portions of these installations with which Mr. Bany was involved or contributed. With marketing, finance and manufacturing functions also being involved in these applications, he did not have to exercise what might be called an entrepreneural function. In many of these large installations it would have been an immense task, too much for one man to cover. However, there were many occasions during which he would have to sell his ideas, not only to someone within General Electric but among its customers, and the competitive situation had to be considered. He is not only an exceptionally competent engineer but also one with a large reserve of patience, especially with individuals not always grasping his explanations or contributions for the first time.

Mr. Bany's life and work are a demonstration of the creative ways in which the engineer serves society.

Jefferson Medal Awarded to Institute Director

Professor L. James Harris, Director of The Patent, Trademark and Copyright Research Institute was awarded the 1968 Jefferson Medal by the New Jersey Patent Law Association. He received the medal at a dinner given by the Association on May 3, 1968 at the Robert Treat Hotel in Newark, New Jersey. His acceptance address is published in this issue of *IDEA*. The following, excerpted from "About the Medalist," in the Jefferson Medal dinner program, will be of interest to members of the Institute and to readers of *IDEA*:

> "The fact that The Patent, Trademark and Copyright Research Institute has attained international recognition and is highly regarded for its work by members of Congress, by the Judiciary, and by industry is unquestionably due in large part to the untiring work of Dr. Harris in acquainting the public with the aims and purposes of the Research Institute, gaining financial support for it, translating the character of the Institute into concrete terms, and organizing and managing its many diverse activities.
>
> "In recognition of his noteworthy service and important contributions to the fields of Patents, Trademarks and Copyrights, the New Jersey Patent Law Association has selected Dr. Harris as the 1968 Jefferson Medalist."

Except for 1966, this highly regarded award has been made annually since 1951. Among the previous winners are: S. Chesterfield Oppenheim, Charles F. Kettering, Giles S. Rich, Judge Learned Hand, Vannevar Bush, Robert C. Watson, O. S. Colclough, Edwin H. Land, Arthur M. Smith, John T. Connor, Walter J. Derenberg and Tom C. Clark.

New Edition of Noted Antitrust Casebook Published

We are pleased to bring to the attention of our readers the publication of the third edition of Professor Oppenheim's *Federal Antitrust Laws—Cases and Comments* prepared in collaboration with Professor Glen E. Weston. Professor Oppenheim is the Adviser on Research of The PTC Research Institute and Professor Emeritus of Law, The University of Michigan, and Professor Weston is a Professor of Law, The George Washington University.

Although this casebook retains the essential structure of the sec-

ond edition published in 1959, it contains many changes. The reasons for these modifications are explained by the authors in their Preface. They point out that, "The span of years, however, has also witnessed the emergence of new major doctrinal trends. Noteworthy in that respect are mergers and joint ventures, restrictions in distribution and franchising, the expansion of the reach of Section 5 of the Federal Trade Commission Act under the Incipiency Doctrine, and the new dimensions in antitrust enforcement attributable to the burgeoning private treble damage suit."

The manner in which the subject matter in the book is organized adds much to its usefulness. As in the second edition, selected bibliography generally introduces the topic and the reader is then guided into the cases by means of instructive comment. The cases and the comments are liberally footnoted and excerpts from many sources are printed at advantageous points throughout the book. The supplementary material provides a range and a depth of treatment that could not be adequately presented by the cases alone.

Headings and sub-headings have been increased in number in this edition and are very effectively utilized. This feature is especially important for busy executives and professional people—as well as for students unacquainted with the subtleties of antitrust doctrine. Although the primary purpose of a casebook is the education of students, the needs of scholars and practitioners are very relevant because of the popularity this work has enjoyed with the latter two groups over the years. Moreover, ease of subject matter identification adds much to the usefulness of the casebook as a tool of instruction for law teachers.

The rich storehouse of information has been compiled by Oppenheim and Weston with due regard to balance in the presentation of controversial antitrust issues. Essential to an understanding of these issues in the competitive national and international context is the considerable material and bibliography in the book dealing with related social science disciplines, such as economics and business administration. The nature of these excerpts and references demonstrates the importance the authors place on empirical data for testing the effect of antitrust policy and practice on the competitive economy.

The general scholarship evident in the book is permeated by a very solid practical information core. Moreover, due attention is directed at the conclusion to administration, remedies, and enforcement. Thus, the student is not only provided with an understanding of antitrust concepts, but is also given ready access to the law that deals with

"what can be done about it," an area too often poorly treated or even neglected in legal literature on substantive law.

The wide and varied choice of materials preserves the law teacher's freedom to use this tool of instruction according to his own plan. Moreover, the abundant references in the text to the *Report of the Attorney General's National Committee to Study the Antitrust Laws,* the reproduction of pertinent antitrust Acts in the appendix, the index, and the table of cases make the book a valuable research source. The comprehensive coverage of the casebook can readily be appreciated in the titles to its 15 chapters: "Introduction to Antitrust Standards and Remedies, and Applicability of Antitrust"; "Economic Indicia of Competition and Monopoly"; "Agreements and Indirect Arrangements Among Competitors Involving Price"; "Division of Markets Among Competitors"; "Trade Association Activities of Antitrust Significance"; "Special Problems of Conspiracy"; "Monopolization Under Section 2 of the Sherman Act"; "Mergers and Joint Ventures Under the Sherman and Clayton Acts"; "Resale Price Maintenance Under Federal Antitrust Laws"; "Refusals to Deal"; "Exclusive Arrangements"; "Incipient Restraints and Unfair Competitive Practices Under the Federal Trade Commission Act"; "Patents and Antitrust"; "Foreign Commerce"; "Administration, Remedies and Enforcement."

The chapter on Patents and Antitrust has been updated and enlarged to accommodate the considerable antitrust activity relating to industrial and intellectual property since the previous edition of the book.

Those who have had the privilege to use this casebook as an assigned text in law school, or who became acquainted with it later on, will welcome the third edition. In this reviewer's humble opinion, it continues to set the standard in its field.

Federal Antitrust Laws-Cases and Comments, is one of the American Casebook Series and is published by West Publishing Company, St. Paul, Minnesota, 1968, 952 pages. LJH

INSTITUTE'S STUDIES ON PRESIDENT'S COMMISSION RECOMMENDATIONS

Editor's Note: *These papers emerging from the Institute's studies on "The Report of the President's Commission on the Patent System," and proposed legislation stemming from that Report, are the fourth publication in* IDEA *of such papers. Previous Institute research papers appeared in Volume 11, No. 3 (Fall 1967); in Volume 11, No. 4 (Winter 1967-68); and in Volume 12, No. 1 (Spring 1968). In view of the urgency for factual information, it was decided to publish the papers as they were completed, rather than await their accumulation. The concluding series of Institute papers on the subject will appear in the next two issues of IDEA (Conference Issue and 12, No. 4). Subsequently, we plan to compile and publish all our research papers bearing on the President's Commission Report and proposed legislation as a single monograph.*

Some Modifications to the Recommendations of the President's Commission on the Patent System

JOHN C. GREEN AND GIDEON SCHMUCKLER*

INTRODUCTION

SINCE THE PRESIDENT'S COMMISSION ON THE PATENT SYSTEM published its *Report* and Recommendations, late in 1966, and the first Patent Reform Bills embodying them were submitted to Congress, a great deal of public discussion has taken place. Individuals and groups have aired their views, committees of both the Senate and the House of Representatives have held hearings, and the press has added its comments. This widespread concern has had a constructive effect. New bills have been drawn up and scrutinized, and fresh proposals have

* Mr. Green is a Project Leader on the Research Staff of The PTC Research Institute. Mr. Schmuckler is Patents Coordinator with the Technion Research and Development Foundation Limited in Haifa, Israel. He has been serving with the Institute as a Student Research Assistant for 1967-68.

been developed in an effort to arrive at a generally acceptable bill. The Patent, Trademark, and Copyright Research Institute, endeavoring to produce well-founded source material on which to base an impartial evaluation of the major issues raised by the Commission, chose two new proposals currently being discussed and submitted them to respondents of three earlier inquiries connected with the Recommendations. A report on this latest inquiry is given hereunder.

The New Proposals

The areas chosen contain two of the most controversial issues raised by the Commission. These are substituting the "first-to-file" for the "first-to-invent" doctrine and enlisting the help of the general public in discovering references—the so-called "opposition" and "cancellation" procedures.

The numerous objections to the "first-to-file" principle have produced a plan to retain the present doctrine but to restrict the "swear-back" period available to the junior party in an interference suit to a specific time period. Four different periods have been suggested. These are one year, two years, three years, and a combination of publication and subsequent filing, which could provide a maximum of two years. Under these proposals a party to an interference proceeding would be permitted to prove all earlier dates but could only obtain the benefit of a date of invention no earlier than one, two, or three years prior to filing his application. If a party's date of invention lies outside the period, he could claim only the date corresponding to the beginning of the period, and it is that date which the other party must antedate in order to obtain the patent. The fourth alternative links the period with the condition that the invention has been made public before the patent is applied for: In case of publication the inventor is given one full year within which he may yet file a valid patent application. His "swear-back" period in that case includes the year preceding publication.

Public discussion and Congressional consideration of "opposition" and "cancellation" procedures as advocated by the Commission (see Recommendations XI and XV), have led to several important modifications. First is the proposed elimination of one of the two devices if the other should be adopted. That is, the public could submit references to the Patent Office either before issue, in order to assist that agency in deciding what claims, if any, are allowable, or after the patent has issued, to seek cancellation of certain claims or the

entire patent. Second is the abandonment of the "high fee" which had been proposed in those cases where cancellation is sought. Third, the period allowed for submission of prior art in either instance has been set at one year.

The Canvass

A questionnaire—the full text of which is given in the Appendix—was sent to the 326 respondents of the previous inquiries addressed to research administrators of major concerns, to executives of medium-sized companies, and to prominent individual inventors. Attention is invited to the explanatory material incorporated in the questionnaire, which sought to outline the reasons advanced in support of, or opposition to, the proposals.

In all, 117 questionnaires were returned completed, and the overall response was thus 36 percent. A breakdown of these figures is given in Table A.

Modified Interference Practice

The most surprising result of this part of the inquiry was the fact that the largest overall group—after those who deprecated any change from the present unlimited "swear-back"—consisted of those satisfied with a "swear-back" period limited to one year. Another surprise was that the large companies were by far the most conservative and found little merit in the proposal to limit the "swear-back" to one year. They were even less enthusiastic over the alternative of linking that period with publication and thus extending it to two years. Medium-sized companies favored the one year period over all others proposed; individual inventors preferred two years, with almost as large a vote

TABLE A

Questionnaires Sent and Completed

	Sent	Returned	%
Large companies	65	24	37.0
Medium-sized companies	70	13	18.3
Individual inventors	191	80	42.0
Total	326	117	36.0

cast for one year. However, in all cases the biggest of the five groups formed were those for the retention of the current practice.

Table B shows the complete response in relative figures (percentages) of all the replies from a particular category.

A set of control questions sought to correlate the "swear-back" periods claimed as desirable with those actually needed. One interesting finding was the relative expeditiousness with which individual inventors reduced their conceptions to practice, as indicated by filing a patent application, and succeed in commercializing them. In this they showed themselves to be fully as competent as the larger companies, if not more so. This point will be more fully discussed in the concluding paragraphs of the present paper.

Space was provided for further discussion, and there are a few observations worth recording. One among them is the suggestion of a research administrator to make a 36-month "swear-back" period conditional on diligent pursuit, a provision that is also under discussion in the circles concerned. The same point is made by an inventor, who also advocates the 36-month period, while another, who would prefer no change but is prepared to accept 36 months, explains the plight of "a lone inventor," who "may not have the money to file until he can obtain a licensee or assignee to pay cost of filing and prosecution." "In any case," says a third inventor, "a three-year period seems more adequate because the depths of arts are getting so deep." A liberal outlook is urged by the inventor who finds that "early filing should be left to the natural incentives rather than (be) forced."

Two inventors strongly advocate the introduction of the first-to-file

TABLE B

RESPONDENTS' PREFERENCES IN MODIFIED INTERFERENCE PRACTICE

	Restrict the Party to a Date of Invention no Further Back than				
	1 yr.	1 yr. Plus Publication	2 yrs.	3 yrs.	No Change
Large companies	9.5%	4.8%	19.0%	14.3%	52.4%
Medium-sized companies	23.0	15.4	7.7	15.4	38.5
Individual inventors	20.5	11.5	21.7	18.0	28.3
Total	53.0	31.7	48.4	47.7	119.2
Overall percentages	17.7	10.6	16.1	15.9	39.7

principle because, as one of them says, "I would like to see all interference controversy eliminated. . . . The *first to file** concept . . . will protect the little inventor. . . ." A research administrator seems at first to advocate the same, but then, in the course of writing, he thinks better of it: "I would award the patent to the first to file but would invalidate it if not by the first inventor who did not abandon, suppress, or conceal. Opportunists (or worse) would not be interested in a race to the Patent Office if they might also have to prove their first invention." Another research administrator adopts the same style—seeming advocacy of the first-to-file principle followed by a virtual retraction—and concludes: "The cloud spoken of [the threat of interferences] is insignificant in relation to the industrial mischief of non-rebuttable inventor first-to-file system."

Finally there is this illustration of the need for a grace period by an inventor evidently drawing on his own experience: "Some inventions will not be completely developed until the actual articles have been in use by the public in quantity for several months, or a year or more in certain complex items. Public use frequently discloses fundamental deficiencies which have to be eliminated in the concept."

* Stressed by respondent.

Submission of Prior Art by the Public

The formulation of this question posed a delicate problem. The impression had to be avoided that the alternatives presented—either a one-year period before issue of an equally long one after issue for the public to submit prior art—were the only ones available. Respondents might not remember the alternatives originally proposed by the President's Commission, which differed materially from the new ones. The questions had to be free of any appearance of unduly influencing the response by spelling out the direction of possible fresh proposals to replace what might well be objectionable. This explains the somewhat lengthy wording, which included rather extensive paragraphs on the thoughts favoring the two proposals as well as the principal objections against either.

As Table C shows (again in relative numbers), there is a strong body of opinion opposing any scheme for enlisting the aid of the public in adducing references; but an equally large group favors the idea, provided the patent is issued first—the principle known as the cancellation method. Opposition—the submission of prior art by the public before the patent issues—came a poor third, amounting to a virtual

TABLE C

PREFERENCES IN SUBMISSION OF PRIOR ART BY THE PUBLIC

	Prefer		
	1 year opposition	1 year cancellation	Reject both
Large companies	24.0%	36.0%	40.0%
Medium-sized companies	23.0	46.0	31.0
Individual inventors	24.0	37.0	39.0
Total	71.0	119.0	110.0
Overall percentages	23.7	39.7	36.6

rejection. As between the categories, there were slight differences in emphasis, with both large companies and individual inventors inclining to be conservative rather than favoring cancellation, whereas executives of medium-sized companies came out strongly for it.

This part of the questionnaire drew forth a spate of free comments, most of it in support of the present state of things—"Leave things as they are," says a company executive. "Retain present type of examination but with enlarged Patent Office Examining Corps and better searching techniques, e.g. computerized information retrieval," counsels a research administrator. Computerization recurs in a number of comments. An inventor finds ". . . nothing wrong with the present system . . . [of bringing] the matter [of a contested patent] to the court's attention. The court will decide. Your proposal would overload the Patent Office. They are overloaded now." Another inventor rejects the two alternatives out of hand as unnecessary because ". . . we do not have any complaints in regard to the Patent Office. We have found the Examiners to be thorough, capable, and firm, which is what we should expect. . . ." He goes on to demand that court proceeding be reformed: "The courts . . . have become lotteries with long delays stifling incentive and progress and rendering decisions too often proven so wrong. . . ." And he ends his essay with an expression of gratitude: "Thank you for the opportunity to express myself."

One research administrator prefers the Presidential Commission's original recommendation of having both opposition and cancellation proceedings, but with an important proviso: "The patent should be subject to invalidation [cancellation] only by the presentation of evidence which could not have been presented in the opposition

proceedings." It has been contended that with the possibility of both opposition and cancellation proceedings competitors would choose the latter, because they could thereby inflict maximum damage on the patent owner. Two other research administrators favor the submission of prior art by others than the Patent Office, but without entailing reexamination—a procedure well known in some foreign countries. Two other respondents, a research administrator and an inventor, would make it incumbent on the applicant to cite as much prior art as he knows and even to complete a questionnaire detailing the sources searched.

A number of modifications were also suggested, mainly directed at different periods (three months, six months) for submission under either opposition or cancellation methods. One company executive proposes to suspend the life of the patent for the duration of opposition proceedings if the 20-year rule is implemented. Typical for the way an inventor's mind works is this ingenious proposal for uncovering references, involving the use of mechanized information storage and retrieval: "Computerize the operation, but do it by contract to profit-oriented groups . . . make all information in computer available to the public via teletype-phone lines for a nominal fee."

The Process of Innovation

The control questions for checking the answers concerning the "swear-back" period deemed necessary yielded some absorbing sidelights on the relative speed with which patents are applied for and inventions commercialized by the three categories canvassed. The upshot was that in those respects, too, there are some significant differences among categories that economically and in the matter of resources differ so widely and, in fact, decisively. If anything, large companies seem slower to patent than either inventors or medium-sized companies, and they are also slower to commercialize their inventions. Accordingly, the individual inventor is far from becoming an extinct species in this country.

Respondents were asked what were the longest, the shortest, and the prevalent time span that elapsed between the conception of an invention on the one hand and the filing of a patent application for it and its commercial exploitation on the other.

Not one of the large corporations, as represented by their research administrators, gave "less than one year" as the longest time from conception to filing; but 16 percent of medium-sized companies and

7 percent of inventors did. Twenty- two percent of the large corporations, but as many as 42 percent of medium-sized companies and 31.5 percent of individual inventors, gave periods of two years or less as their longest time taken for filing.To explain the large vote against any change in interference "swear-back" come the groups that had inventions where filing took three years and up: 61 percent of the large corporations canvassed, 33 percent of the medium-sized ones, and 48 percent of the individual inventors are in this class.

As illuminating are the statements concerning the shortest time taken in filing: All three categories gave periods of less than one year as the overwhelming majority. Only one large corporation (in the ferrous metallurgy branch) seemed to imply that they could never make it in under three years, and two individual inventors took at least two years.

Of general interest are the figures for the normal run of things. Medium-sized companies as well as inventors usually take less than a year in 58 percent of the cases, large companies in only 48 percent. Large and medium-sized corporations are roughly equal in the 1-to-2 years' group at about 42 percent, while in the 2-to-3 years' group there are no medium-sized firms, but large firms and individual inventors are represented almost equally—10 percent and 12 percent respectively. To return to the problem of limiting "swear-back" in interferences: For the usual cases this would make little change, but in exceptional and, conceivably, important cases there could be considerable hardship.

Commercial exploitation follows a trend similar to that of filing practices, the figures given by respondents as the general rule in their operations showing that over three quarters of the large companies take more than two years from the conception of an invention to putting it on the market. Medium-sized companies are as a rule quicker off the mark, with only 55 percent usually taking over two years until marketing. One of these firms, a maker of drugs, notes that FDA requirements delayed commercialization for five years. Individual inventors have the best record, 47.6 percent requiring over two years for marketing.

It should be noted that there are complex and time-consuming inventive developments which require a combination of financial investment, research facilities, and scientific skills which are beyond most inventors and small companies. Fortunately, large firms can, and do, support this type of invention, and this fact is reflected in the periods required for protection and exploitation. The point worth

stressing is that all three—individual inventors, small companies, and large firms—are contributing effectively to the total sum of innovations in the economy.

Summing Up

This special investigation was begun in the late spring of 1968 as the two issues considered here evolved from public discussions and executive considerations.

Contrary to the practice followed in previous studies, where the stress was upon facts and actions, the present questionnaire sought opinions and preferences, with facts requested as a means for checking them. A short distillation of the philosophy and attitude revealed by the information gathered might be:

The present system of granting the patent wherever possible to the first and original inventor and of excluding the public from the dialogue between applicant and Patent Office is satisfactory and should be retained. Interferences are tolerable, and it should remain the prerogative of courts of law to invalidate or otherwise modify issued patents. More desirable is a strengthening of the Patent Office and a streamlining of its procedures, especially search, examination, and interference practice.

It should be noted that the respondents to this questionnaire understand the patent system and employ it regularly and successfully in their commercial endeavors. Their conservative approach to the ideas proposed appears to reflect (1) an appreciation of the patent system as it operates today, (2) a recognition that constructive improvements are desirable and welcome, and (3) a rebuttal to rumors that the system is in trouble and in need of major change.

APPENDIX

Questionnaire

THE PATENT, TRADEMARK, AND COPYRIGHT RESEARCH INSTITUTE
OF THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, D. C. 20006

Dear Sir:

This is a request for additional information on the study of the President's Commission on the Patent System, to which you have already made a valuable contribution. It involves an extension of your views on two major issues which have emerged during our investigations and the recent Congressional hearings.

A. Modified Interference Practice

It has been proposed that some type of interference practice should be retained to determine who is the prior inventor and entitled to the patent. The following alternatives are now under discussion:

(Please detach on the dotted line to assure that the information remains confidential.)

(Please check the appropriate box)

1. Restrict the party to a date of invention no further back than (a) 12 months ☐, (b) 24 months ☐, (c) 36 months ☐ before he filed for a patent.
2. Restrict the party to a date of invention no further back than 12 months before he disclosed the invention to the public, or filed a patent application, *whichever is earlier.* ☐
   (This would enable one who had published his invention and later filed a patent application, to establish a priority date including (a) 12 months before he published, plus (b) the period of up to 12 months between the publication and filing dates.)
3. Not to restrict the party with regard to the time which elapsed between conception and filing. ☐

Each alternative has its adherents. Those who argue for 1. (a), 1. (b), or 2 stress the need for encouraging early filing. Those who favor 1. (c) or 3 point to the time that may elapse between "discovery" and a clear understanding of the invention, including how best it can be produced commercially.

For a clearer conception of the time involved in the innovative process, would you please state how long innovations introduced by you or your firm take to proceed from "conception" or "discovery" to:

1. filing a patent application?

   longest time————, shortest time ————, general rule ————;
2. commercial use?

   longest time ————, shortest time ————, general rule ————.

B. Submission of Prior Art by the Public

Sometimes the amount of relevant technical information readily available to the U.S. patent examiners is inadequate. Accordingly, it is felt that the patent system would be strengthened if the public could advise the Patent Office of additional pertinent patents, industrial practices, publications, and the like.

In this connection the following alternatives are receiving consideration:

1. *Publish the application* when allowed and give the public one year in which

to present information to the Patent Office. If the information is pertinent, the application will be re-examined by the Patent Office.

Your reply: I prefer this proposal ☐
I do not favor this proposal ☐

2. *Issue the patent* and give the public one year in which to present information to the Patent Office. The Patent Office would in this case re-examine the patent, if the new information is deemed pertinent.

Your reply: I prefer this proposal ☐
I do not favor this proposal ☐

Apparently, the major objections to plan (1.) are: (a) the administrative problems of publishing the application before issue; and (b) the fact that the additional time involved in appraising the new references and re-examining the case would stretch out the time between filing and patent issue. (If the "20-year" rule is put into effect, this would shorten the time between the grant of the patent and its expiration.)

The major objections to plan (2) seems to be: (a) the fact that the patent would have to be re-examined, placing a new workload on the Patent Office; and (b) that there is a cloud on the validity of the patent, and therefore its value, during the first period after its issue.

If neither (1.) nor (2.) above is acceptable, do you have a third alternative to suggest?

Suggestions and Remarks

The Presidential Commission's Recommendations: Public Interest Agencies' View

JOHN C. GREEN AND GIDEON SCHMUCKLER*

INTRODUCTION

IN THE LAST 25 YEARS numerous important innovations have derived from the federal government and from educational institutions. The former contributes first, as a research performer through its numerous laboratories, and second, as a sponsor of scientific efforts through contracts or grants with industry, research institutes and universities. The educational institutions are usually thought of as the focus for advanced, or "pure," research, a substantial amount of which is underwritten by federal funds.

The approaches to these two important groups took into account their separate interests in the patent system, particularly their differing reasons for obtaining patents. Other studies conducted by the Institute have confirmed the fact that the distinct categories of innovators find different features of the system of major concern and value to them. For example, a firm whose main interest in patents is to see that its rights to manufacture an invention are not disturbed has a different

* Mr. Green is a Project Leader on the Research Staff of The PTC Research Institute. Mr. Schmuckler is Patents Coordinator with the Technion Research and Development Foundation Limited in Haifa, Israel. He has been serving with the Institute as a Student Research Assistant for 1967-68.

attitude toward "early publication" from an inventor who may wish to disclose his patented idea to a number of manufacturers with the objective of licensing or selling the patent. Similarly, there is a disparity of interest within government agencies and universities which can be traced to their understanding of how best to employ the patent system in the furtherance of their basic missions.

Federal Government

The government has an overall responsibility to see that the patent system operates for the general good and is consistent with the Constitution and the pertinent laws which have been enacted. In addition, the Department of Defense wants to be sure that the system encourages the creation, the development, and the introduction of modern weapons and the tools of defense.

The needs of the Agriculture Department are quite different. That agency strives to expand the consumption of farm products; accordingly, they want the patent system to encourage industrial participation in their work and the prompt adoption of their findings.

Then there is the National Aeronautics and Space Administration with an extremely broad mission. Like Defense, they wish to relate the patent system to their primary mission—obtaining a better understanding of space around us and getting that man to the moon and back. In addition the Congress has directed them to encourage the civilian applications of their developments as a stimulus to the economy.

Next there is an evolving series of missions assigned to a number of government agencies which might be grouped loosely as "public health and safety." Examples are medical research, water and air pollution, and regulation of automobile transportation. These are government-initiated technical activities, conducted often in cooperation with private enterprise, which are designed to increase our well-being and hopefully to improve our environment.

Agencies Sampled

The Institute considered that the examination of the public sector should encompass (a) the federal agencies who do most of research and development, and (b) those representing the varied interests mentioned. Therefore, within the federal establishment we approached the three military services—Army, Navy and Air Force; the

Atomic Energy Commission; the Department of Agriculture; the Department of Health, Education and Welfare; the National Aeronautics and Space Administration; the Tennessee Valley Authority; and the National Bureau of Standards. Eight of the nine departments and agencies were interested in our project and were cooperative. The ninth, the Department of Health, Education and Welfare, told us they were unable to compile the information we had requested. As a general policy DHEW favors dedication to the public of inventions in contrast to seeking patent protection. Therefore this response may be an unconscious reflection of that Department's attitude to the patent system in general.

Each of the other agencies undertook upon our request to review a series of inventions previously developed in their laboratories or under their auspices, and to trace the successive steps including conception, reduction to practice, the decision to patent, the preparation and filing of the application, publication and the grant of the patent. They then agreed to look at these same inventions and estimate what procedures, if any, would differ under the principle proposals advanced by the Presidential Commission.

Recommendation I & II

We certainly did not expect anyone in government to disagree with the Commission's findings, most of which have been adopted by the Executive branch and sent forward to the Congress as proposed legislation. We did believe that we would get an expert analysis of what changes they would have to make, and this expectation was realized. Many of the agencies viewed as a primary problem area the familiar "first to file," abolition of the grace period, and substitution of preliminary applications combination set forth in Recommendations I and II. Some of the patent departments noted the current curbs on personnel which made it difficult to keep abreast of the current workload. They foresaw substantially greater problems if the preparation of numerous preliminary applications and the earlier filing of larger numbers of inventions became a part of their task. One military service's comment in discussing one of their case histories illustrates this point:

> In view of the relatively few patent personnel permitted . . . due to manpower limitations and the relatively large numbers of invention disclosures of . . . employees and R&D contractors (approximately 1800) to be evaluated and further processed each year, it

> would have possibly been necessary to simply drop this invention disclosure from further consideration either at the outset or early in the evaluation or patent process. Difficulty in obtaining funds and manpower necessary to operate a procedure such as is outlined above might cause a severe curtailment of 'invention follow-up' by patent personnel in actual practice. Undoubtedly some compromise from an ideal procedure would be necessary in order to prevent the accumulation of an impossible patent workload.

The authors observed that the National Aeronautics and Space Administration is required to develop complex technical equipment to permit men to navigate in space and to land safely on the moon. Also, they have to encourage the civilian applications of these devices and systems. The NASA representatives offered an interesting comment on "cancellation of grace period" and substitution of preliminary applications:

> If grace period is cancelled, NASA would have to speed up the filing of patent applications to avoid prior publication bar by NASA or others. If patent protection is deemed to be overriding factor, policy would have to be adopted to withhold all technical publications until patent decision is made: perhaps publication could be withheld for specific period to allow reasonable period for filing application. This would encourage trade secrecy. Withholding of publication is currently against NASA policy.

The U. S. Department of Agriculture has a number of large and competent laboratories working to develop new uses for farm products which will increase their consumption. Agriculture values highly its ties with industry which provide a bridge between a successful piece of research and its large-scale production and supply to the public. In analyzing one of its case histories the Agriculture Department commented as follows:

> . . . it is not likely that the preliminary application could be prepared and filed in time to precede scheduled sessions with the industry group, so that changes would have to be made in our relations with industry. This might involve, for example, insertion of special provisions in cooperative agreements allowing us to withhold any information we thought might have patent significance. This, in turn, would add further complications such as impeding communication and interfering with initiating cooperative agreements. Also, if the investigators were particularly cautious or patent minded, it might lead to a situation where they would communicate nothing of significance to the industry group, with the end result that the cooperative effort would become a nullity. In sum, where the contemplated invention would be one arising out of cooperation with an industry group, I am inclined to believe that the situation under the proposed patent procedure would be reduced to: No cooperative agreement with industry and no invention to be patented.

The Atomic Energy Commission, whose patent activities are governed by specific legislation in the atomic energy fields, displayed a strong interest in licensing its inventions to industry. With respect to most of the Commission's recommendations they believe they could "live with" them if they were enacted into law. There is one exception—the cancellation of the grace period—which would cause publication problems. Here their response is similar to that expressed earlier by NASA.

One government agency found no problems arising under the proposals. This was the Tennessee Valley Authority. Personnel interviewed there favored most, if not all, of the recommendations and found none which would adversely affect their activities.

The feeling that "first to file" would place larger workloads on the agencies without a corresponding increase in personnel was tempered by some negative views on interference practice. Here two agencies noted examples of the complex and time-consuming interferences that they had experienced. Assuming that they would be in a position to follow up promptly and prepare applications from the inventor's disclosures to the patent department, they conceived of obtaining patents more easily and promptly if interferences were abolished.

In one case history described, the government department found itself in an interference with a company with which it had a research and development contract. There was a clause in the contract under which the government was given a royalty-free non-exclusive license for any inventions arising out of the work financed by the government. Nevertheless, the interference was prosecuted for over two years. The agency lost, and then took advantage of its rights to avoid any payment of royalties. Perhaps lack of flexibility in government contract procedures is at fault as well as interference practice. It is probable that if both parties had been private companies there would have been an early and reasonably amicable settlement.

The Commerce and Agriculture Departments had specially interesting comments with respect to the value of keeping the laboratories open to the public. Since their work is financed by federal funds and is intended for public access and application, they welcome visitors to their laboratories and encourage discussions with informed members of the public concerning their latest developments. The Department of Agriculture described how this might be changed if the new proposals were put into effect:

> Under the first-to-file system the inventors would have been most reluctant to discuss their work with people outside . . . for fear of being scooped. Under the added burden of no grace period they

> undoubtedly would have tried to keep their ideas and experimental data confidential until they could release in a preliminary application enough of a disclosure to cover their inventions.

In reviewing these case studies it appears that the anticipated negative effects on disclosure of innovations made with public funds would be the most serious defect. The combination of inadequate numbers of personnel to prepare the applications, the difficulty of getting government scientists and engineers to report their ideas at an early date, and the feeling of many research personnel that they could not talk freely about their discoveries prior to patenting, would slow down communication between government and industry to the disadvantage of both.

Universities and Research Institutes

First let us look at the universities, their present interest in the patent system, and how this might be affected. Here the sample chosen represents those universities actually holding patents issued in the years 1964, 1965 and 1966, plus a listing prepared from published directories of university research. In addition, two organizations experienced in handling problems of patent protection and marketing for academic institutions were helpful in identifying universities with interest and experience.

In this way a sample of 42 universities and 19 non-profit research institutions was assembled, and a special questionnaire was prepared and mailed to them. This was designed to develop information with respect to the understanding of and feeling about patents in the academic environment. Therefore, the questions were addressed to the administrator and the professional staff. They covered such questions as (1) Are patents judged to be as valuable in the advancement of personnel as publications in professional journals; (2) Do patents contribute to the university's role as a disseminator of knowledge; (3) Are patents studied regularly as part of the scientific and engineering literature; (4) Are there instances where significant developments were not patented by choice? In other words, are academic personnel aware of patents, do they value patents highly, and what are their policies with respect to patents?

The response to this questionnaire was most gratifying. Thirty-three out of the 42 universities (or 79 percent) and 11 out of 19 of the research foundations (or 58 percent) cooperated in supplying the desired information.

PUBLICATION BEFORE ISSUE

Most educational institutions announce their discoveries in the scientific press or in public conferences before related patent applications have been filed. In our study we found only three universities and one foundation that do not undertake prior publication in one form or another before consideration of patentability and the desirability of obtaining patent protection. Two institutions invariably make prior announcements. The significant point is that publication is the accepted course taken by research workers and is accorded precedence over patents. Therefore, if Recommendation I was enacted, academic institutions would have to change their policies and perhaps limit publication with respect to the university scientist so as not to lose rights, or perhaps to dedicate their discoveries involuntarily. The trend might be to set up formal patent analysis procedures on the campus, as is done in a few universities today. The Institute's study shows that 11 out of the 32 universities do have an office that reviews staff members' publications for patentable subject matter and five out of 11 foundations have a comparable mechanism.

However, both universities and research institutes rely on staff members' initiative in bringing ideas to their attention. Any new supervision would have to be widespread and more positive if the institution wished to preserve rights under a patent system devoid of a grace period. It is doubtful if academic personnel would take kindly to such a limitation. And it is only less doubtful if the research investigator's watchfulness wth respect to possible patentability would be increased materially. The general attitude on campus to patents is lukewarm now, and new rules would not improve this situation. (This observation is not as applicable with respect to non-profit research institutes or foundations, where a more positive attitude toward the system prevails.)

The following quotations come from a university that has shown a relatively great awareness of patents, and in fact holds many useful patents in its own name. Two responses to a question concerning consideration of patentability prior to publication are pertinent:

> Educational institutions publish more than they patent and such a system would place an inordinate burden on them to review all materials prior to the publication date. This situation does not prevail in the industrial community.

> If prior publication were to preclude patenting, the patent

> programs of most, if not all, educational institutions would likely be terminated for lack of funds to file applications on each and every possible patentable concept.

Attitude Toward Interferences

Earlier, we referred to the negative views on interferences expressed by some government agencies. Our questionnaire developed that 13 out of 32 universities and seven out of 11 foundations (43 percent and 63 percent respectively) have been involved in interferences in the past. This was a surprising statistic. We have a study now in progress directed to the costs and values of interference proceedings; therefore we think it enough to say here that one can expect a university to have a similar attitude toward interferences as does a government agency. That is, they are complex and time-consuming; if they could be done away with it would be better as long as the university did not lose legitimate rights as a result.

Public Access

Another similarity between the government laboratory and the university is with respect to availability to scientific colleagues and the public. Twenty-six out of 32 universities now grant unrestricted admittance to their research laboratories except where classified defense work is concerned. Only 13 would continue to do so if the first-to-file principle became the law of the land. Six expressly stated that they would restrict admittance. A more suspicious attitude would become customary. As one replied,

> By protecting the first applicant to file on an invention, the relatively open nature of the university laboratories would make them happy hunting grounds for those bent on the thievery of patentable ideas. It would be possible for such individuals to see an invention in a university laboratory and rush through an application on it without the university inventor having the opportunity to rebut the alleged inventorship by date relating to the conception and reduction to practice as is possible under the present system.

The reports from research foundations are more optimistic. Eight now grant unrestricted admittance, three do not; six, or only slightly less than is now the case, would continue to be open to the public if the proposed change were put into effect.

Preliminary Applications

Recommendation II refers to the substitution of preliminary applications for the grace period. Here we asked the institutions whether they would advise their staff members to file preliminary applications, and whether they had any comments on the recommendation as a whole. All but two of the 27 universities would advise their staff members to file, and the research foundations were unanimous in recommending this course.

Despite their lack of numbers the two academic institutions who responded negatively deserve mention since they have had relatively large patent experience. One stated that preparation and filing of a preliminary application should be authorized only if the invention is considered to be "salable," a fact not often known at the time the discovery is made. This university observed also that it has insufficient funds to file preliminary or complete applications on all patentable ideas. The second respondent, a major state university, also gave expense as a principal reason militating against filing preliminary applications which, they observe, must be done before the invention can be fully evaluated.

With the exception of one respondent, whose comment was simply, "Good," even those who favor preliminary applications have some reservations. A few commented along the following lines: "The Patent Office would be flooded with oddball disclosures." Others agree with the view that such filings would be costly and time-consuming, and several commented that the invention may not be adequately covered.

One university which said that it would file preliminaries also observed, "Many times we would wait until a complete application could be filed." And another (perhaps more outspoken) said, "This provision would be harmful in either the respect that (1) publication would have to be withheld and laboratories kept under security until proper preliminary applications could be filed, or (2) patents and the advantages thereof to the public would have to be given up in order that the scientific community could openly exchange ideas."

All the research foundations, as noted earlier, that felt they would file preliminaries, offered a number of comments none of which can be said to be completely favorable. Among opinions offered were, "Difficult to see any useful purpose that this would accomplish"; "I see no particular need for this; it can lead to a lot of problems"; "likely to lead to a multiplicity of disclosures based on inadequate information."

In summary, while the educational and research community are

prepared to go along with preliminary applications, they see numerous disadvantages and no particular benefits.

Assignee Filing

This recommendation would permit an assignee to sign the application for a patent provided that he enclosed a declaration of ownership. Here it was found that 26 of the 33 universities, and all 11 of the research foundations, now require their staff members to assign all inventions to the institution.

As to the necessity for the proposed procedure, only three of the universities, and none of the foundations, admitted to having had any difficulty in obtaining an inventor's signature despite the relatively frequent absence of academic personnel at conferences, on sabbatical leave, et cetera. Therefore the provisions of this recommendation would have little influence on either policies or practices at academic institutions.

Publication Before Issue

Recommendation VII, which is concerned with early publication of a pending application, produced two groups of answers. The first was concerned with the use to which public applications might be put at the university, the second with whether there might be conflicts between desired announcement in scientific and professional journals and the early publication contemplated by this recommendation. The first group showed some significant differences but also some unanimity. Both universities and foundations advised that they would study published applications prior to filing their own patent applications. Usually this would take place before filing a complete rather than a preliminary application.

When it came to using published applications for other purposes, a divergence developed. Universities showed themselves less prone to using applications for the avoidance of research duplication, while foundations seemed to think this might have some merit. Fourteen universities who would thus adopt patents into their research program are counterbalanced by 12 who would emphatically not do so. Of the 11 foundations from the 19 queried, eight would use published applications for both purposes and only three would not. Does this imply that universities are more confident of their comprehensive

knowledge of the field than non-profit research foundations?

With respect to a potential conflict between the published patent application and a journal article covering similar subject matter, only nine respondents feared a conflict might arise, while 28 thought this would be unlikely. Some noted that the delay between submission of a manuscript and publication may be 18 to 24 months, which is roughly the same period of time that the Commission recommended for the disclosure of the contents of pending applications.

Citation Period

Recommendation XI, with respect to opposition procedure, touches universities and research foundations at a number of points. Specifically, there is a question whether these institutions, with their stores of specialized knowledge and their public or quasi-public purpose, would consider it a duty to oppose patent applications where appropriate. Related thereto is a supplemental inquiry concerning a preference for *ex parte* or open proceedings. As many as 10 universities agreed to the proposal that opposers should not be disclosed to applicants, although the majority, 15, was for open proceedings. Research foundations, on the other hand, were in favor of open proceedings, seven to two of the nine respondents to this question. The relatively large number of universities favoring *ex parte* proceedings came somewhat as a surprise.

It is nevertheless an academic exercise, for, asked whether they would study patent applications in order to oppose them where appropriate, only three universities and no research foundation said clearly that they would not consider instituting opposition proceedings. Therefore Patent Office Examiners can expect little expert, disinterested help from academic institutions.

Cancellation After Issue

Recommendation XV contemplates cancellation upon the payment of a relatively high fee after the patent is issued. There is no reason to believe that the universities and research foundations would act differently towards seeking cancellation than they would towards opposition. That is, ordinarily they would not employ their talents and specialized knowledge to assist the Patent Office in finding pertinent publications and like information.

The few universities with a positive interest in patents are favorable to licensing since they see this as an effective method of disclosing and disseminating the knowledge they have acquired—thus the problems of encouraging patent licensing during a period of uncertainty after the patent issued was of special interest to them. Universities were asked whether they considered that it would be necessary to modify the conventional licensing agreements during this period of time, both for their own protection and for that of the licensee. Fourteen universities considered that modifications would be required, while 13 thought that this would be unnecessary. A majority of research foundations felt that the present agreements would be adequate.

One of the respondents observed that the proposed procedure would affect businessmen's willingness to enter into licensing agreements. He noted that if business firms waited until the cancellation period had expired, much of a patent's useful life will have passed and one of the aims of the Commission, namely the introduction of new technologies at an early date, will have been missed.

It was surprising to note how many in the academic world appreciate industrial reluctance to risk capital on an idea while it was still vulnerable to attack. For example, one of the respondents said,

> Under the new proposal, industry will hesitate to try out an invention prior to filing and will hesitate to invest risk capital until after the opposition proceeding, since the wages of success would almost inevitably be opposition. The opposition could result in a reluctance on the part of industry to fully invest in new untried ideas until a much later date than is now possible. This will almost eliminate the basic research inventions of universities from any likelihood of commercial development.

A second foresaw a cloud over a patent during the cancellation period, which would make it "difficult to write exclusive licenses where further research is required." And a third observed, "To prosecute successful patent applications under such circumstances is going to make it much more difficult for individual inventors and their assignees, the universities."

Interim Liability

This is the recommendation that empowers an applicant to demand interim royalties for infringement if, and when, four conditions have been fulfilled: (1) the application must have been published, (2) the claim on which the preissue infringement rests must have been

declared allowable, (3) the claim must be substantially the same as the one in the published application, and (4) the applicant must have transmitted a notice to the infringer reasonably indicating how his acts are considered to infringe. The recommendation also distinguishes between patents involving a process and those involving a manufactured item, a machine, or a composition of matter.

Institutions were asked if they would take advantage of the provisions suggested by the recommendation, and if they had any pertinent comments. Twenty of the 33 universities replied to this question, 18 felt that they would take advantage of the provisions. Foundations were more evenly divided with five respondents in favor, and four against.

There were some comments with respect to the requirement to grant licenses if this avenue were followed. One university observed, "We would oppose having to grant a license to a party not of our choice," and followed this with an expression, "It would restrict our ability to grant exclusive licenses to a best qualified party." This sentiment was echoed by the president of a research foundation. Nevertheless, most of the academic institutions would favor this recommendation, while leaving it to their patent counsel of a patent servicing organization to advise them when to take advantage of it.

Term

This recommendation refers to the 20-year term for the patent. There was little outright objection to this recommendation. However, one university president said, "We would object to charging time of filing and prosecution to the life of the patent." Perhaps his observation gains weight when one learns that academic institutions' experiences with patenting, particularly the periods of pendency, had tended to be protracted. The two longest noted in our replies were nine years and 11 months, and eight years and one month, respectively. (However, both of these were as a result of secrecy orders, and thus not applicable to present-day circumstances.) Another excessive period of pendency was six years and nine months, charged to "many exchanges between our attorney and the Patent Office."

All in all, 397 applications of universities and research foundations in the years 1960 through 1966 had to wait over three years until issue. On the other hand, there were three universities who noted that none of their applications took over three years to issue.

One might observe that with the projected improvements in Patent

Office operations, that is, a reduction in the period of pendency within the office, this change in the method of reckoning the term of a patent will not arouse many difficulties in the academic world.

International Action

Recommendations XXXIII, XXXIV, and XXXV were grouped together since broadly they are directed toward the goal of a single, universally respected patent. Twenty-one of the 33 universities and nine of the 11 research foundations considered the impact of this general proposition upon their patent activities. In general they favored the idea, although it was pointed out by some that on campus foreign filing is a minor and infrequent activity. One reason for this, as earlier pointed out, is the academic desire to publish findings in a recognized journal, relying on the U.S. grace period to permit filing for protection later. There are three additional reasons mentioned by the few who have undertaken to file abroad. These are: (1) difficulties caused by differences between countries; for example, the prosecution procedures, standards of patentability, and working requirements; (2) the problem of deciding in which countries to seek protection; and (3) the related problem of financing the procurement and maintenance of foreign patents.

A few of the respondents believed that these inhibitions to filing abroad would be removed if and when a single universally respected patent was available. Accordingly, it should be said that this objective met with general approval. The writers believe that most of the respondents did not recognize an inconsistency between preservation of the first-to-invent system with its grace period which permits their academic scientists to talk freely and write for publication prior to filing, and adopting those features of the European systems which would increase secrecy and restrict communication of new discoveries.

Research Administrators Appraise Proposals to Revise the Patent System

JOHN C. GREEN*

APPROACH

THE INSTITUTE RECOGNIZED that changes in attitude or behavior of industrial research administrators would have profound effects on commercial innovations. Hence one of the early approaches was to such persons. Fortunately, the Industrial Research Institute, which includes many such experts, proved to be both interested and cooperative. It has been estimated that over 95 percent of the total dollar volume of industrial research performed in the United States is carried out by the companies represented in the I.R.I. Since each of the men approached under the collaborative effort has special knowledge of how his company treated innovations from inception, to production, to development, to commercial introduction, we asked for case studies of successful inventions including the time frames and key company decisions. Then we asked the administrators to analyze these case studies and to indicate where and how the proposed changes would alter the innovative process. This complemented the question-

* Mr. Green is a Project Leader on the Research Staff of The PTC Research Institute.

naire and interview approach which was employed in most of the other studies in the Institute's project on the *Report of the President's Commission on the Patent System.*

Two hundred and fifty-nine companies were asked to cooperate in the study. Forty-nine companies presented one case history, and 19 included additional cases—a total of 68 case analyses was received. In addition, 15 administrators submitted letters explaining their company's position with regard to the recommendations of the Presidential Commission's *Report.* From these 83 responses, the information that follows was compiled. Only 33 of the original canvass responded negatively, and 162 did not reply at all. The above mentioned number included selected research-based small firms as well as the I.R.I. affiliates.

Significant Findings

Four general propositions emerge from the examination of the wealth of information received. These are:

(1) Inventions which are major advances in science and engineering take a longer time to comprehend, develop, evaluate and protect than the more usual improvements on existing products or processes. This distinction will be lost in simple statistical analyses which indicate average times from conception to filing. Relatively few patents issued each year define major discoveries. However, it is these few which contribute most to scientific and economic progress. Hence it would be unwise to deter or discourage their protection.

(2) Many times large companies with capable scientific staffs look outside the firm for advice and assistance in developing an invention and/or evaluating its commercial importance. This disclosure and collaboration may be with consulting engineers, universities, manufacturing firms or government agencies. However, its basic purpose is to find out as much as possible about the invention as quickly as possible in order to decide (a) is the invention worth protecting and (b) if so what is the protection to which the inventor is entitled.

(3) Many of the research and development practices in industry which contribute so much to our economic progress and advancing living standards are based on the "first-to-invent" concept. In this connection it is interesting to note that nearly 83 percent of the responses identified important company innova-

tions which would have been impeded had the cluster of recommendations relating to "first-to-file" been in effect at the time they were conceived.

(4) Publication before issue of the patent, which is intended to make information available at an earlier time, would have a reverse effect in many instances. Several of the research administrators pointed out how automatic disclosure of unprotected inventions while they were still investing time, facilities and money in their perfection would increase industrial secrecy and discourage use of the patent system.

Information was also received on (a) Preliminary Applications, (b) Opposition and Cancellation, (c) Interim Liability, and (d) International Action. Here the anticipated effects on the conduct of industrial research and development were of lesser significance although a few noteworthy observations were offered. Accordingly these topics and comments are covered briefly in the latter section of this paper.

Case Studies

The volume of information on innovation in industry assembled with the help of the Industrial Research Institute is too great for reproduction here. Therefore a few extracts from the case histories have been selected which illustrate the major findings reported. The courtesy of the companies which authorized these quotations is most appreciated.

Time From Conception to Filing

The first example is in the general class of ceramics, one of the oldest arts known to man. It describes a new material which required extensive investigations to determine its physical properties, scope and uses. The second is a series of patents relating to a power transmission belt which invention required (a) an extensive testing program to produce the superior product and (b) a public educational program to induce commercial acceptance and to attract licensees.

> The invention here concerned, I would classify as a "basic" invention in that it involved the production of a type of material which did not exist before. The invention was based upon the discovery that crystalline ceramic bodies could be made by controlled crystallization or devitrification of glass. Prior to this discovery, devitrification of glasses was looked upon by the glass industry as

something to be avoided at all costs.

Because of the basic nature of the discovery, it was necessary to explore many parameters before the invention could be completely understood and defined. To name but some of the elements which were investigated in attempting to understand the invention, it was deemed essential to determine the effects of varying the type and amount of various nucleating agents, variations in basic glass compositions, whether or not glass-melting conditions were critical, the effects of contaminants which might be inadvertently introduced into the glass, times and temperatures used in crystallizing or devitrifying the glasses, and the interrelations between variations in the above-mentioned and other parameters.

Over three years were spent by the inventor and his associates in intensive experimental work before it was felt that enough was known about the invention to adequately describe it in a patent application.

During the course of the experimental work, several thousand different compositions were melted and heat-treated; and several hundreds of these samples were subjected to tests of physical properties.

One of the compositions being investigated had properties which appeared to make it suitable for use as radome for missiles then being developed by the Navy; and experimental samples of this material were furnished to Navy representatives for testing before our patent application was filed.

As a result of the thorough experimental work which preceded the filing of the patent application, it was possible to prepare an application which not only contained over one hundred actual examples, but which also so completely described the invention and the manner in which it should be carried out that one wishing to practice the invention could easily reproduce the recited examples as well as produce others not specifically described.

In spite of the intensive experimental work which preceded the filing of the patent application, over a year of additional development work preceded the introduction of prototype commercial products. . . .

Had the first-to-file system been in effect at the time when the discovery under discussion was made, I believe that prudence would have required us to file a patent application almost immediately, and certainly long before we should have had the opportunity to develop enough knowledge about the invention either to define its scope for proper claiming or to describe it in an application with sufficient clarity to feel sure that one reading the application would be able to realize embodiments of the invention other than those specifically described.

So far as the effects of the one-year grace period are concerned, the existence of that grace period made it possible for us to disclose certain aspects of the invention to Navy personnel on a non-confidential basis, and furnish them with samples of material comprising embodiments of the invention, in advance of the filing of the application. Without the benefit of the grace period, we would not have made the material available to the Navy or disclosed the existence of the invention prior to filing of the United States application, for fear that such acts might be construed as having

placed the material on sale or within the purview of public knowledge.

I cannot conceive that we could ever, under a first-to-file system, afford to take the risk which would be involved in delaying filing long enough to enable the preparation of an application as complete and extensive in disclosure as that which was ultimately prepared covering the invention under discussion. It is therefore almost certain that under a first-to-file system, the total number of applications which our Company would file would be increased and the quality, from the standpoint of good, concise disclosures necessarily reduced, because of lack of knowledge of the scope of inventions which would be available at time of filing.

The basic raw material was not one developed by———Company but was early recognized as possessing characteristics which inherently should enhance performance of power transmission belts. Extensive research, however, was conducted on compounding formulations, designs, specifications, test data, manufacturing processes and equipment at least as early as 1957. Organizational structures were developed to coordinate various activities through the engineering and marketing channels and by 1960 most of the immediate problems were solved. Solution indicated then a commercially acceptable power transmission belt possessing better performance characteristics was possible. Changes significantly different from power transmission belts previously being manufactured indicated a necessity for a comprehensive, educational program to introduce manufacturers and consumer users to such a product. Consequently, in 1963 before commercial belts were available, a comprehensive educational program to such potential customers was initiated.

Patent applications covering products and methods for the manufacture of the belt were filed in June of 1958. It is recognized that a great deal of study and development was conducted prior to any thought of filing for patent protection. Additional patent protection was sought by filing continuations in part and divisions of the patent application. Subsequent applications were filed as recently as February 1962. Many foreign applications were filed at various times subsequent to the filing of the United States applications when it was recognized that the resulting product was indeed a unique advance over the prior art. The result both here and abroad was the issuance of a package of patents relating to the new development.

By 1964 the educational program had found its mark among equipment manufacturers and major consumers. Competitive companies received numerous reports from the prospective purchasers of the unique product, and there were inquiries about the availability of such a product from competition. Inquiries were received from competition with serious consideration being given to competition by the time two patents were issued. These two patents were issued in 1964 and 1965. With the issuance of the patents which indicated the scope of protection, serious negotiations were begun and the first license agreement was executed in December of 1965. In all, three very major competitors were licensed with the final license being executed in September of 1966.

A few factors pointed out very emphatically the importance in some of the techniques. It was obvious that the thorough educational program given had a great influence on the acceptability of the product and further on the desire of the competitors to participate in the manufacture and/or sale of such a product. In addition, it was also rather obvious that because of certain similarities with known prior art, none of the major competitors was interested in a license until patents issued and it became obvious that the products and methods were amply protected.

Let us now examine a simulation of events assuming that the patent policy incorporated the changes as proposed by the President's Commission as indicated in the attachment. First, as was already hinted, the product was similar enough to known art that no one was interested until the degree of protection was established. In reality, if the patent policy utilized a program whereby the patent went to the first to file rather than the first to invent, it is extremely doubtful that full patent protection would have been obtained. Belts made from castable elastomers were known. Merely casting belts from such elastomers simply would not result in the anticipated improvement. As a matter of fact, with the type of materials utilized, satisfactory castings could not be obtained. It is only as a result of trying to find methods for satisfactorily casting the product that the superior product was discovered. It was by extensive testing that far superior products resulted. Thus, initial filing would never have revealed the latter discovered methods which not only solved the casting problems but also produced a superior product.

If a grace period had not been granted, certainly sufficient testing could not have been conducted on existing applications to indicate the necessity for further development. Artificial test conditions simply do not reconstruct such field procedures and fall short of indicating reality.

Cooperative Investigations

This group indicates the variety of cooperative efforts employed by firms in perfecting and evaluating an invention. The two case histories under the heading "Trial in Commercial Operations," below, also provide information on the time which may elapse from conception to comprehension of the value and scope of the invention.

Disclosure to Universities and to Government

Since the pharmaceutical industry works closely with academic scientists often patent applications from this collaboration are not filed until after the initial scientific publication. We have numerous examples of patents in which such publications would be statutory bars under the proposed reform section.

The case history enclosed illustrates one important aspect of the value of the present first inventor concept. There are however several benefits of this concept farther back in research which are

very real. As one example, we often submit compounds for specific screening by various Government agencies such as the National Cancer Institute. Since under the present law the proprietary rights on these compounds would belong to us if positive activity is found at our suggestion we have little hesitation on entering these programs despite the present onerous Government patent policies. If the first-to-file concept were accepted, we would have to reconsider the risks involved in such collaborative screening programs.

Disclosure to Suppliers

It is believed that the proposed revision of the patent system would increase the need for secrecy and this would be a detriment to our commercial operations and product development. Extensive work is done cooperatively with suppliers and, in the absence of a specific agreement with a particular supplier, we would be more vulnerable if a supplier (even with good intentions, but with a disagreement as to the actual contribution of his employees and ours) elected to file a patent application on something we felt we had wholly or partially invented. Under the "first-to-file" rule, he would have a patent and be in a position to control our procurement and we would be at his mercy as to price. Under the present system an interference would resolve the conflict. In summary, our exchange of information with suppliers and others would be impaired.

Disclosure to Product-Oriented Companies

Our people must rely on can manufacturing companies and companies which package goods in cans for advice, technical assistance, and evaluation in connection with proposed innovations, and an innovation must ordinarily be tested by such companies before one knows whether it is likely to be of commercial interest. Consequently, the developments devised by our people are disclosed to numerous persons in those companies. . . .

To preserve the patent rights on each of the hundreds of developments devised in the program described above, a preliminary patent application would have to be filed on each development when it is decided to do work on it. Also, the necessary disclosures to outsiders could not be made until such persons signed an agreement not to disclose the information to others (Paragraph 105 of S. 1042) and a patent application would have to be filed within six months of execution of that agreement.

Often the outside companies mentioned above do not complete in six months their study and tests of the innovations disclosed to them. Hence, many patent applications would have to be filed in the Patent Office on developments that were later found to be worthless or outdated by other developments.

Moreover, many companies refuse to accept non-disclosure agreements when asked to provide development advice or assistance, in which event our company would have to lose either the patent rights or the benefit of assistance that is needed to produce improvements beneficial to consumers.

Disclosure to Potential Licensees

The —— Company has recently put in service our first electronic switching systems. The first such system, known as a No. 101 ESS, was put in service as a PBX for Cape Kennedy on November 30, 1963. The second type of system, known as a No. 1 ESS, was put in service as a central office in Succasunna, New Jersey on May 30, 1965. The systems use the concept of stored program control of their operations and this approach is being followed by other companies. One of our patents is directed to this broad public acceptance and success.

Because we have a policy of sharing knowledge of our developments, we decided to hold a meeting for those companies who would be licensed under this invention by prior agreements. At this meeting we wanted to describe a total system which would be put into field trial service in Morris, Illinois. A large number of inventions were involved, but the important one for present purposes is the one covered by the patent aforementioned because as of that time the application resulting in the patent had not yet been filed.

This private symposium was held at our Laboratories in March of 1957. The field trial at Morris, Illinois did not start until June 1960. The symposium was attended by representatives of over 20 companies, both U. S. and foreign. The decision to go ahead with the meeting even though the patent application on the very important invention had not yet been filed was based upon the recognition that under current law we would be able to establish our prior invention if there were any disclosures or applications filed by other companies based upon what they learned at that meeting. Thus, the fact that it is the first inventor who can obtain a patent under present law was crucial to allowing the symposium at that early date. Also of importance was our realization that an inadvertent disclosure in print by one of the attendees who might do so in order to give credit to our work and describe what he had learned at our meeting would not immediately act as a total bar to our obtaining this important patent because of the present grace period allowed in the law.

Trial in Commercial Operations

. . . there are a large number of instances where determination of whether a worthwhile invention has been made depends upon a trial in a commercial operation. . . .

As a first example, consider the fact that in the glass melting industry a commercial furnace is generally a continuously operating monster, involving an investment of over $500,000 and capable of producing from 40 to 100 tons of molten glass a day. Inventions in furnace construction or methods of furnace operation are now primarily measured by the following two criteria:

(1) The ability to increase the furnace output without decreasing the operating life of the furnace or increasing, in total, the cost of constructing, operating and rebuilding the furnace.

(2) The ability to substantially increase the operating life of the furnace without reduction in output or increase in overall costs.

> Since it should be perfectly obvious that no one can afford to experimentally operate a furnace of this size for normal life period of three to five years, it necessarily follows that new methods of construction or operation of a furnace must be tried in a commercial operation where the furnace necessarily would be utilized to produce molten glass which is converted into articles which are sold. Even under our present patent laws, this type of operation has been interpreted by the courts to constitute commercial use of the invention and, hence, a U. S. patent application must be filed within one year from the date of initiating such commercial use of invention. It is difficult enough under the present laws to decide whether the new construction or method of operation of the furnace really represents a patentable improvement when the real "proof of the pudding" will not be known for a period of from three to five years; however, this situation is still much preferred over the absolute elimination of the grace period as proposed by some advocates for reform of the patent system. Two such patents in the glass furnace art are Nos. ——— and ——— copies enclosed, which relate to an insulated bottom construction for a glass melting furnace wherein the prime value of the invention is increased operating life and reduced rebuild costs.
>
> The same problem exists in many other industries where large capital value equipment must be utilized and the merit of a particular invention is the ability to either increase the operating life or output of such capital equipment without deleterious effects on the operating life. Paper pulping equipment, paper making machinery, steam turbines, and large power generators are representative examples.

In verification of the observation contained in the preceding paragraph the following statement made by the ——— Company is included:

> . . . our products are made for the steel industry and . . . the final proving is accomplished in their furnaces. It is a very slow process of obtaining their cooperation and then awaiting the end of a furnace campaign before complete appraisal of an invention becomes possible.

A case history which illustrates two important attributes of the present system follows. These are (a) encouragement of early disclosure and (b) the value of outside technical assistance. In the extract quoted hereafter these two features advanced the perfection of the invention, moved ahead its introduction, and contributed to our national defense.

> Aluminum is produced by extraction of alumina from bauxite ore, followed by electrolytic reduction of the alumina to aluminum. Early in World War II United States' importation of bauxite was so seriously threatened by German submarines that it became necessary to develop a process to recover alumina from domestic ores which could not be used economically in customary procedures for producing alumina.
>
> Accordingly, ——— Company investigated simultaneously three

different processes for treating such ores. One of those processes—after many changes—evolved into the process covered by the captioned patents. That process went into large scale use during the war, and such use still continues.

Development work on the process was conducted with extreme urgency and top technical priority. In the course of that work technical assistance was sought from several outside companies and individuals, such as manufacturers of kilns, filters, and evaporators, a construction engineering company, an outside consultant and his assistant, and a university laboratory having equipment needed in one phase of the work. As a result the process, or portions thereof, was disclosed to several U. S. government officials having responsibility for alumina production adequate to supply the amounts of aluminum needed in the war. The disclosures mentioned above antedated the filing of the applications for the captioned patents.

Many process and equipment variations and modifications were made in the course of developing the eventual process. Also, the nature of the process was such that a trial on a plant scale was necessary before one could know whether the process was actually technically feasible. When that had been done, applications for the captioned patents were filed.

Automatic Publication Before Issue

Twenty-three administrators saw disadvantages in this recommendation and nine thought it would be advantageous. The remainder did not comment, thus it can be assumed that it would not have had a direct bearing on the innovations they reported. In general those administrators who felt that such publication would result in increased secrecy commented along these lines:

> . . . competition will now be able to file improvement patents and/or invent around our pending inventions. . . .

Among the 23 who felt that early publication of pending applications would not be desirable there were three observations worthy of special note:

> The early publications by both parties indicate that the proposed automatic publication is not necessary in the U. S. In these instances, publication in a scholarly scientific manner occurred in one-half the time suggested in the *Report*. This illustrates how the present system encourages early publication of meaningful scientific advances but does not fill the art with scientific "trash."

> . . .we would seriously consider abandoning the U. S. and foreign cases within 18 months after the first application and before publication of any of the foreign cases. The decision on whether or not to abandon the cases would be a difficult one in a case like the

> one discussed above in view of the potential importance of the process, the doubts of many people on all levels at the time the decision has to be made that the invention will prove to be beneficially operable and commercially profitable, the risks of relying on secrecy, and the uncertainty as to whether or not adequate patent protection will eventually be obtained. It appears more likely than not that we would have chosen abandonment if the decision had to be made much earlier. Having decided to operate in secrecy, there would be no publication and no licensing program.

> In this instance, there is a good chance the publication of the first application would have occurred prior to introduction of the product on the market. If this did occur, we would consider the consequences as quite undesirable. In the appliance business, the first inventor to introduce the product on the market achieves a definite competitive advantage, apart from patent protection. Thus, a development of this nature is carefully held in secrecy until actual product introduction on the market.

Preliminary Applications

Most views on preliminary applications echoed those heard earlier from other innovative sectors. Preliminary applications would be employed if authorized; however, numerous respondents spoke of the time and money costs involved in preparing applications on ideas which would be "washed out" later. On the other hand, one major firm which produces highly sophisticated equipment did favor preliminary applications without qualification. In speaking of one of their case histories they said:

> With regard to the systems patent, considerable time is required to prepare and file an application for such a patent. Therefore, under the proposed new law, we would probably have filed a preliminary application disclosing the basic concept of the invention. This would then have given us more time to prepare the complete application.

Opposition and Cancellation

These related topics produced mixed responses. There were roughly as many respondents who saw advantages in the concepts as those who anticipated problems or deterrents. Most of those who favored believed that the multiple considerations provided for would produce a stronger patent. Those who foresaw disadvantages usually spoke of the additional uncertainties which would discourage commercial introduc-

tion and licensing.

The parallel study addressed to universities and research foundations, and reported at the June 1968 Annual Public Conference, found that the opportunity to cite relevant references would not be taken advantage of in most instances. It has been argued that private firms would be more likely than the academic community to review proposed patents, and present references where appropriate. This would be a task of considerable magnitude. Perhaps a realistic appraisal of the situation is summarized in the following quotations from a major manufacturer of consumer items.

> . . . substantial time is required to search for the prior art. When a company is as broadly based as———we simply do not have the manpower to search the thousands or more of the invention publications issued monthly which might be of interest to our various divisions. Accordingly, it is my guess that we will concern ourselves only in the issuance of selected patents to others which would appear to have a very substantial impact on our production and that, with respect to these, we would probably cite art only when we believe it to be a complete anticipation.

This firm also supplied information with respect to licensing during the period that the claims may be opposed or cancelled.

> We also believe that licensing the subject patent would have been delayed by the proposed statute. Actually, we began negotiations with several prospective licensees while the invention was in the application stage. Naturally, competitors are reluctant to take a license until a patent issues and the full scope of claims found patentable by the Patent Office is known.
>
> Secondly, the licensing program can be delayed or acceptable royalty rates lowered by the possibility of cancellation proceedings.

Interim Liability

Liability for infringement is a matter of more concern to a company's general counsel than to a research administrator. Hence it was touched on only lightly by our respondents. Those who discussed it favored the recommendation. However, there were two observations which indicated reluctance and gave reasons therefor.

> We are not convinced that a court determination of a reasonable royalty would be the same as the royalty figure obtainable from direct negotiations with a prospective licensee. Too often, arbitrary standards of 3 percent of the selling price of the item or some such number is arrived at; whereas the true value in terms of savings to the licensee may amount to 1000 percent of the selling price of the item used in the invention. More equitable arrangements can be arrived at by arm's length bargaining from a position in which the

> inventor has not been deprived of his ability to license at an equitable royalty because of publication "over which he has no control. . . ."

> . . .Noting the reference to "reasonable royalty license," we make the point that we are opposed to compulsory licensing and, therefore, are opposed to statutory language which suggests compulsory licensing.

The latter quotation highlights that part of the recommendation which contemplates "the granting of a reasonable royalty, nonexclusive license" in those cases when the applicant elects to create an interim liability. The responding administrator considered this to be in effect a compulsory "license." As is well known, this term is anathema to most industrial experts in patent negotiations.

International Action

While most of the research officials cooperating in the project are employed by large U.S. firms with international interests and affiliations only 19 noted that their decisions would be altered if the U.S. moved toward a single, internationally respected patent. Of this number 12 favored and seven were negative. Perhaps the general attitude of the 12 is expressed by one electronics manufacturer who stated succinctly:

> In principle, this is a worthwhile goal but we should not discard those features of the U. S. system which make it superior to the systems of other countries. We believe that the examination system, interferences (simplified, if possible), and the grace period should definitely be retained.

COMMENTS

Research administrators have been termed "Vice Presidents of the Future" since their operations often determine a firm's growth and competitive success. The study revealed that these experts have a good working knowledge of the patent system, its function in our economy, and how proposed changes would affect industrial research and development. The informed estimates of men responsible for guiding much of the innovative efforts in our society deserve special consideration.

Domestic and International Trade Aspects of the USSR Trademark System

JOSEPH M. LIGHTMAN*

SUMMARY

THIS ARTICLE PROVIDES CURRENT INFORMATION on and analysis of the USSR trademark system as a part of The PTC Research Institute's continuing examination of Eastern European trademark systems and their impact on U.S. trade relations (*IDEA*, Vol. 10, No. 1 [Spring 1966] and No. 4 [Winter 1966-67]). The sweeping economic reform measures in the USSR since 1965, and its adherence to the Paris Union Convention (International Convention for the Protection of Industrial Property) that year, have resulted in measures designed to up-date its trademark procedures, among other facets of its industrial property system. While much has been written on patent licensing and technology transfers in U.S.-USSR trade relations, the trademark aspect has been neglected. The PTC Research Institute believes that the subject of trademarks now deserves more emphasis, since, as U.S. firms consider marketing prospects in the USSR, they should be fully aware of the protection to which they are entitled there for their valuable trademark rights.

* Mr. Lightman is a Research Associate with The PTC Research Institute. He is also an International Economist with the Foreign Business Practices Division, Office of Commercial and Financial Policy, Bureau of International Commerce, U.S. Department of Commerce, which shares no responsibility for the views expressed here.

Foreign firms interested in the USSR market may want to look into various sales techniques focusing on trademarks that could possibly be utilized there, including advertising and trade fairs. Recent U.S. actions pertinent to trademark interests in USSR trade include the Consular and the Air Transport Agreements, removal of export licensing requirements for certain non-strategic products, and a U.S. Trade Mission to Eastern Europe. The USSR Trademark Law embodies a "registration system" as the basis for establishing trademark rights, not the "first user" common law system. Foreign trademark filings in the USSR are increasing. U.S. filings in that country are still far below those in non-Eastern European industrialized countries, although this situation may change as the USSR continues to develop a growing market for manufactured products and to participate more extensively in the Paris Union framework.

INTRODUCTION

TRADEMARKS AS COMPETITIVE MARKETING TOOLS are obviously less significant in a State enterprise economy, such as the USSR, than in the competitive economies of industrialized countries outside of Eastern Europe. As in other Eastern European countries, trademarks[1] in the USSR have served primarily as "grade marks" to facilitate government surveillance over the quality of factory output rather than as marketing tools. Registrations under its trademark law have been relatively low when compared with those in industrialized non-Eastern European countries (see Table 1 at end of paper).

It is to be noted nevertheless that sweeping economic reform measures instituted by the USSR since 1965, and its apparent desire to improve trade relations with the West, have had important ramifications in the country's industrial property rights sector,[2] including the trademark system. The government's emphasis on strengthening and improving its industrial property laws in recent years has been

[1] I.e., marks registered as industrial property rights under the USSR Trademark Law, as distinct from "production" or other markings assigned to each factory for government identification purposes.

[2] E.g., in the updating and complete codification of its legislation pertaining to patents and inventions (see texts in *Industrial Property*, published by United International Bureaux for the Protection of Intellectual Property, No. 4 [Geneva: April 1967]) and in the promulgation of a new Industrial Design Law, July 9, 1965 (*id.* No. 12 [December 1965]).

reflected among other ways in a continuing series of measures designed to update its trademark system.

The earlier article published in *IDEA* in 1966 on the USSR trademark system spotlighted its relationship to Western concepts of trademark protection and East-West trade.[3] Developments since then, which appear to have an important bearing on the USSR trademark picture, have prompted a new assessment by The PTC Research Institute of that picture, with particular reference to the trade situation.

Since 1966, new insights into the role of trademarks in the USSR's domestic and foreign trade picture have emerged from information now brought to light on the "Sales, Profit and Rate of Return on Capital" criteria which many enterprise managers are now required to use. Also, detailed data on industrial property rights activities are now being published by the USSR through the United International Bureaux for the Protection of Intellectual Property (BIRPI) and through its own channels since adhering to the Paris Union Convention in July 1965.

The main thrust of the comprehensive Soviet economic reform measures, enacted in September and October of 1965, is to help improve economic performance by vesting in enterprise managers more independence from their superior agencies. They are also made more responsible for maintaining a profitable production operation and are guided in this respect by criteria aimed at producing high-quality marketable products rather than meeting production quota targets, as such.[4] The new "success indicators" instituted under the reform movement have resulted in a growing awareness among participating enterprise managers of the need for distinctive markings on their products, not only for identification and quality control purposes but as marketing tools. An apparent manifestation of this awereness was the unusual number of domestically originated trademark applications filed and registered in the USSR in 1965, the year the reform

---

[3] "The USSR Trademark System and East-West Trade," *IDEA*, Vol. 10, No. 1 (Spring 1966), pp. 11-31.

[4] During 1966, 704 enterprises accounting for 10% of the industrial work force and 12% of industrial production had been transferred to this new system. By 1967, total enterprises in the new system had grown to 7,000 accounting for about 40% of the total industrial production; by the end of March 1968, this figure reached 10,000 enterprises accounting for about 50% of production of about 45,000 enterprises. (Source: *Soviet Economic Performance, 1966-67* Committee Print of U.S. Congress Joint Economic Committee's Subcommittee on Foreign Economic Policy, 90th Cong., 2nd Sess. [Washington, D. C.: G.P.O. May 1968] p. 129). In a July 1968 issue of *Ekonomicheskaya Gazeta*, it was reported that 20,000 enterprises producing 60% of total industrial output had been transferred to the new system.

movement began (see Table 2).[5]

The basic significance to U.S. businessmen, and those of the other 83 member countries, of the USSR's adherence to the Paris Union Convention is, of course, the fact that such businessmen are now accorded national treatment and other special benefits for protection of their trademark, as well as patent, industrial design, and trade name rights in that country.[6] Another important facet of this adherence, however, is that the USSR is now affording the Western world (through BIRPI) details on such matters as filings, registrations, legal procedures and other information relative to Soviet industrial property laws never before available. Such material has appeared not only in recent issues of BIRPI's monthly publication *Industrial Property*[7] but also in certain other BIRPI publications, such as that on an East-West

---

[5] Another contributing factor to this unusual activity in the trademark field in 1965 may also have been the USSR's adherence to the Paris Union Convention that year. Foreign trade organizations wishing to exercise various rights under the Convention, such as the six months' "right of priority," and also seeking domestic approval of the marks they intend to use in the member countries, presumably filed an unusually large number of applications in 1965.

[6] The USSR Council of Ministers Decree of March 8, 1965 (No. 848) announced Soviet accession as of July 1, 1965.

The Paris Union Convention is the major intergovernmental agreement in the industrial property rights field and is now adhered to by about 85 countries including the U.S. and Canada, eight countries in Latin America, all of the industrialized countries in Europe, most of the African countries and many in the Middle East and Asia. Industrial property rights are defined in the Convention as patents, utility models, industrial designs, trademarks, service marks, trade names, and indications of source or appellations of origin (Art. 1, Revision of 1958). The Convention's basic principle is a guarantee by each member country to provide foreigners the same protection for their industrial property rights that it provides its own nationals (i.e., national treatment). The Convention goes beyond national treatment, however, and also provides certain special benefits and advantages for nationals of member countries, such as a one-year period after the first filing of a patent application in a member country (or a six-month's period in the case of trademarks) in which to file a corresponding application in another member country and receive in the latter the benefit of the first application filing date. Other advantages include protection in each member country of a member-national's patent against arbitrary forfeiture for non-working and a right of a member national to file a trademark without first having to register the mark at home. (The 1958 Revision, which is the latest in effect, to which most of the countries including the USSR adhere, incorporates this latter feature. Earlier revisions (1911, 1925 and 1934) to which some countries still adhere as their latest revision in force, still enable them to retain the "prior home registration requirement" if they so desire it.) By adhering to the Convention, the USSR has now joined most other nations in agreeing to abide by those internationally accepted protection principles that have been in effect for industrial property rights since the Convention was adopted in 1883.

[7] Pertinent material from this publication will be cited further in this article.

Industrial Property Symposium it conducted in Budapest in 1966,[8] at which several Soviet patent and trademark officials spoke on the state of their country's laws. In the past several years, two comprehensive English language publications by the USSR have also appeared in the United States on Soviet industrial property systems and have been given fairly widespread distribution.[9] Additionally, other English translated material in growing quantity has appeared in the past two years relative to speeches and analyses by Soviet officials on that country's patent and trademark system.

Much has been written on the subject of patent protection in the USSR in English language technical, trade and legal journals. This element of industrial property rights is, of course, most important to U.S. firms interested in the Soviet market. The PTC Research Institute, nevertheless, feels that the trademark aspect is now deserving of more emphasis than it has been given in the English language press in the context of U.S.-USSR trade relations. As U.S firms consider marketing prospects in the USSR, they will want to be fully aware of the protection available to them in that country for their valuable trademark rights. Also, the USSR has shown considerable interest in technical interchanges and licensing agreements with the West. In this connection, it has taken important steps to develop favorable conditions for licensing activities—including changes in the trademark as well as patent laws to make them more compatible with Western systems, creation of an agency specifically designed to handle licensing and other industrial property transactions with foreigners,[10] and the retailoring of patent, technical know-how, and trademark provisions in its commercial agreements to conform more to Western standards of accepted protection.

Foreign trademark filings and prosecutions are generally handled by the USSR Chamber of Commerce's Patent Bureau. The Chamber which, among other activities, represents various organizations interested in foreign trade promotion, is one of the principal Soviet entities delegated the responsibility for making contact with foreign business organizations.

---

[8] "BIRPI East-West Industrial Property Symposium, Budapest, 1966" (Geneva: March 1967).

[9] *Protection of Invention in the U.S.S.R.: Basic Principles,* Committee for Inventions and Discoveries Attached to the Council of Ministers of the U.S.S.R. (Moscow, 1966); *Protection of Industrial Property in the U.S.S.R.,* by M. Boguslavsky and I. Cherviakov (Novosti Press Agency Publishing House).

[10] The All-Union Export-Import Association "Litsensintorg." Among other things, this agency endeavors to interest foreigners in selling or licensing their industrial property in the USSR.

Administration of all industrial property laws, including trademarks, is coordinated within the framework of one agency—the State Committee for Inventions and Discoveries (hereinafter "Committee").[11] Here, it is to be noted that trademark administration has not been relegated to any lesser agency than that responsible for administering the important laws pertaining to protection and utilization of inventions and technology.

Based on the new information which has been brought to light on the USSR trademark system, this article will examine these latest developments in detail with particular reference to their trade implications.

Trademarks and Soviet Trade

The USSR's trade turnover (exports and imports) in 1967, which amounted to 18.2 billion dollars, represented an increase of about 8 percent over its 16.8 billion dollar trade figure in 1966. On the basis of its total trade turnover, the USSR ranked among the eight major world trading nations; the others in descending order of magnitude being the United States, West Germany, United Kingdom, France, Japan, Canada and Italy.[12] U.S. exports in 1967 to the USSR rose to 60.2 million dollars, from 41.7 million dollars in 1966.[13] The USSR continued to manifest a strong interest in purchasing from the U.S. and other western countries machinery, chemicals and other manufactured products of the type generally advertised and marketed under trademarks.

Procedural Considerations

Most American companies seriously interested in foreign trade generally register abroad anywhere from one-fourth to two-thirds of their U.S. owned trademarks, for defensive as well as marketing purposes.[14]

---

[11] An "independent agency" reporting directly to the Council of Ministers.

[12] *Op. cit. supra* note 4, *Soviet Economic Performance, 1966-67,* p. 97, for USSR statistics; International Monetary Fund, *International Financial Statistics,* Vol. XXII, No. 4 (April 1968), pp. 34-35, for other countries' statistics.

[13] *Export Control,* 83rd Quarterly Report, 1st Quarter (U.S. Department of Commerce, May 15, 1968), pp. 8-9.

[14] For further information on foreign registration practices of U.S. firms, see *IDEA,* Vol. 11, No. 4 (Winter 1967-68), "Economic Aspects of Trademark Utilization," pp. 472-499; and *IDEA,* Vol. 10, No. 3 (Fall 1966), "The Economic Role of Trademarks and Their Utilization as Business Assets," pp. 323-336.

In the USSR as in many countries the first person to apply for a mark is entitled to its registration and to legal recognition of its exclusive use. Unlike the situation in the United States, the right to a trademark in the USSR does not arise out of a system of common law appropriation and use; it is based on registration.

The owner of a foreign mark who finds that someone else has already applied for or registered it in the USSR is faced with a problem of contesting the "pirated" application or registration. Should he decide not to contest it, or should he be unsuccessful in such action, he is then faced with possible foreclosure of his trademark in the Soviet market. More important, the possible Soviet registration of a "pirated mark" may create problems for the rightful owner of the mark in third country markets, particularly in less developed areas.

Companies having an internationally used trademark (a "house mark," product, or service mark) which they publicize abroad, find it highly desirable to register such a mark in every country where a possible sales interest or piracy problem may exist. Under the Paris Union Convention, member countries are required to protect "well-known" marks against registration by persons other than their rightful owners.[15] Past experience, however, has indicated that the term "well-known" is subject to a wide variety of interpretations among many member countries. A U.S. mark widely used and registered abroad may not necessarily qualify as "well-known" in a particular country. Most companies engaging in foreign trade therefore find it desirable to register their more important marks for protection in the first instance, rather than to rely on the Paris Union Convention premise that "well-known" trademarks shall be protected even in the absence of a registration.

It is likely in many instances that trademarks will be coupled closely with patents or know-how in the licensing of United States products to Soviet enterprises. In this connection, licensing consultants in the United States may strongly advise their clients, in the interest of their future safety as potential licensors as well as trademark owners, to register their marks in their own name abroad and to protect them as such.

---

[15] Under this Convention, a member country must provide the rightful owner of a "well-known" mark registered to someone else, a period of at least five years from the date of such registration in which to seek its cancellation. After that time, however, the country can prohibit a party from seeking such cancellation on grounds of being the rightful owner of the "well-known" mark.

Marketing Techniques

Foreign firms interested in the Soviet market, bearing in mind that imports are controlled by state trading organizations and that distribution is still geared to state planning directives, may nevertheless look into various marketing techniques focusing on trademarks that might possibly be utilized in the USSR.

Advertising seems to be growing in the USSR. Trade journals are the media primarily used by production enterprises to advertise their goods to other industries and the consumer trade, but radio and television advertising is expanding. An increasing number of foreign firms, including American, are using Soviet media to advertise their products and impress their brand names upon appropriate Soviet purchasing authorities and the consumer public.[16] It is interesting to note that in the USSR the Soviet lawmakers themselves now recognize the role of trademarks in advertising. The first paragraph of the present trademark law emphasizes that the purpose of a trademark is not only to distinguish an enterprise's goods and services but "to advertise them."

The Soviet enterprise Vneshtorgreklama handles advertising of Soviet goods abroad and of foreign goods in the USSR. Advertising of Soviet-made products domestically is directed by the State enterprise Soyustorgreklama, which also supervises such advertising organizations in each of the 15 Soviet Republics. On January 16, 1967, Vneshtorgreklama ran a large ad in the *New York Times* (pages 56-57) inviting American firms to utilize its services in advertising their products in the USSR newspaper, magazine, radio and television media. For the U.S. foreign trading community's edification, the ad also provided information on about 30 Soviet foreign trade organizations that serve as the country's import and/or export monopolies for particular commodities. Also described were activities of Litsenintorg (see footnote 10) and the patent and trademark activities of the USSR Chamber of Commerce. The ad also showed for these and the other Soviet trading organizations the trademark each used exclusively to identify itself abroad.

As in other Eastern European countries, trade fairs in the USSR also appear to provide good showcases for the trademarked goods of foreign firms. Two such fairs were held in 1966, three in 1967, and

[16] The advertising and brand promotion activities of several American firms in the USSR are described in the December 1967 issue of *Marketing/Communications*, in an article by Sol Fox, entitled "The Odd Couple: Marx and Marketing," pp. 51-52.

four will be held by the end of 1968, according to the available schedules. Four have been firmed up so far for 1969 and two for 1970.[17] These exhibitions cover a variety of industrial and consumer-type goods, each year attracting exhibitors from Western as well as Eastern Europe. Soviet trademark law provides recognized protection for an unregistered trademark on goods displayed at such exhibitions should the applicant wish to file for its registration within six months after he puts the goods on display. In such instances, his application filing date is the date on which he first displayed his goods.[18]

Recent U.S. Action Pertinent to Trademark Interests in Soviet Trade

President Johnson, in his State of the Union message delivered January 17, 1968, noted the progress which had been made in U.S.-USSR relations despite the fact that "Serious differences still remain between us. . . ." He cited, as examples, the recently concluded Consular Convention and Commercial Air Agreement between the two countries.

Also to be noted is a Joint Resolution (S.J. Res. 169) introduced in the U.S. Senate, May 9, 1968 (90th Cong. 2nd Sess.) calling for a re-examination of the Export Control regulations and Export-Import Bank financing restrictions to permit an increase in peaceful goods trade between the U.S. and Eastern Europe. It was referred to the Senate's Banking and Currency Committee and was still pending as of the writing of this article.

Recent U.S.-USSR Agreements

The above agreements are among the specific actions taken since 1966 to implement the President's appeal that year in his State of the Union message, and a later major policy speech, that we build bridges of peaceful trade with Eastern Europe.[19] Trademark owners interested in the Soviet market may find the treaties particularly interesting.

---

[17] *International Commerce* (June 27 and December 26, 1966; June 26 and December 25, 1967; and July 8 ,1968), published by U.S. Department of Commerce. The interest of U.S. manufacturers of trademarked goods in these fairs is exemplified by the participation of 18 U.S. firms in the automatic food handling equipment (Inprodmash), 15 U.S. firms in the clothing exhibition (Odezha) and about 10 U.S. firms in the mining equipment (Intergormash) fairs in 1968.

[18] Soviet Trade Mark Law of 1962, Art. 11, para. 5, (see Appendix B).

[19] State of Union Message, January 12, 1966; Speech of October 7, 1966 to The National Conference of Editorial Writers, New York City.

The Consular Treaty, which entered into force July 13, 1968, establishes the conditions under which Consulates may be opened by each country in the other's territory, and also provides for certain basic safeguards for individual rights of each country's nationals in the other's territory.[20] Additionally, it establishes the framework for enhancing commercial contacts between the two countries by enabling the creation of centralized sources for each country in the other's territory to render commercial advice, services and assistance. The U.S.-USSR Civil Air Transport Agreement, signed November 4, 1966, and amended May 6, 1968, provides for direct flight services between New York and Moscow to be implemented by Pan American World Airways and the Soviet airline Aeroflot. The flights began July 15, 1968. A number of U.S. businessmen were among the first to book passage aboard the initial flights.[21]

Export Control Actions

In 1966, the Department of Commerce removed requirements of export licenses on about 400 non-strategic items for shipment to the USSR and other Eastern European countries with which we have diplomatic relations.[22] Most of these items are of the consumer and industrial type generally identified by trademarks, such as clothing, prepared foods, hardware and tools, electrical, measuring, and air conditioning equipment. There are now around 900 products which are exportable to the USSR and Eastern Europe under general (open) license.

Also of interest to exporters of trademarked goods is the Department of Commerce announcement last May of a new procedure to expedite export licensing of sample shipments of certain commodities to the USSR and to other Eastern European countries.[23] Under this procedure it will approve "without extended review" applications to export samples valued at no more than 200 dollars to these countries. This

---

[20] President's Transmittal Message of June 12, 1964 and Text of Treaty signed June 1, 1964, appears in U.S. Senate Document *Consular Convention with Russia,* Executive D, (88th Cong., 2nd Sess.).

[21] State Department, *Treaties and Other International Acts, Series 6135;* Amendment appears in State Department Press Release No. 94, May 6, 1968. *Business Abroad,* Vol. 93, No. 15 (August 1968), p. 9. Published by Dunn & Bradstreet, Inc.

[22] As a direct follow-up to the President's major policy speech of October 7, 1966. See footnote 19 and *Current Export Bulletin, No. 941* (U.S. Department of Commerce, October 12, 1966).

[23] Since then, additional items have been added to the list as a result of continuing review. *Id. Current Export Bulletin,* No. 965 (May 10, 1968).

should save considerable time to prospective exporters of trademarked goods who do not specifically seek advance indication of approval for subsequent commercial shipments. Issuance of a license for a sample does not constitute a commitment by the Department to approve shipments in commercial quantities at a future date. The new procedure is limited to five product categories: chemicals, drugs and pharmaceuticals; synthetic rubber; petroleum and petroleum products; lubricants, additives and operational fluids; and metals and minerals. Coupled with this action was the removal of certain power-operated tools from requirements of export licensing to Eastern European countries.

U.S. Trade Mission

In addition to liberalizing the export control regulations affecting shipments to the USSR and other Eastern European countries, the Department of Commerce sponsored a trade mission organized by the Minneapolis Chamber of Commerce which visited the USSR as well as Poland, Romania, Bulgaria and Yugoslavia. The mission members were impressed by the keen interest of Eastern European commercial officials in U.S.-branded products and a desire for appropriate catalogs and literature.[24]

Salient Features of the Trademark System

Trademarks in the USSR, as previously noted, have served primarily as factory identification and quality control symbols. Until enactment of the present trademark law in 1962 (superseding the earlier law of 1936), little attention was paid to their potential function as competitive sales and advertising devices, and as distinctive identifications to enable prospective buyers to choose between similar goods made by different enterprises. There appears to have been little attempt by the Soviets before that date to make any significant changes in their trademark system to bring it more in conformity with international standards of practice and procedure.

Long before the Soviets joined the Paris Union Convention, the other six Eastern European countries (Czechoslovakia, Bulgaria, Romania, Hungary, Poland and Yugoslavia) were members and adherents to its

[24] *Op. cit. supra* note 17 (November 27, 1967), pp. 14-16.

international standards of trademark as well as patent protection. In the USSR, where articles have been produced in most part for industrial usage and for domestic consumption, the trademark system in effect before 1962 did little more than to force state enterprises to use certain markings on their goods so that liability could be established in cases of quality defects or faulty handling of goods. The earlier Soviet Trademark Law of 1936 is summarized in Appendix A.

The present law came into force June 23, 1962 (see Appendix B for text). It does not deal specifically with "Production or Factory Marks" included in the 1936 law. Such marks are apparently not abolished although it seems that they will become obsolete for identification and liability purposes in view of Council of Ministers' Decrees of February 16 and May 15, 1962, requiring enterprises to register and use trademarks on consumer and capital goods.[25]

Scope of Present Trademark Protection

The law provides that "Every trademark, before it is used in the USSR, shall be subject to compulsory State registration with the Committee for Inventions and Discoveries. . . ."[26] The owner of a registered mark is entitled to its exclusive use in the USSR.[27] It is not clear whether a non-registered mark may be used in the USSR with no recognized exclusive rights therein or whether no trademark whatsoever may be used unless it is first registered in that country. No legal decisions or other clarifying official rulings from the government are available.

Trademarks are registered for the term indicated by the applicant up to ten years from the application filing date; renewals also cannot be made for more than ten years at a time.[28] The rights to a trademark lapse upon expiration of the validity term, waiver of such rights by the owner, or liquidation of the enterprise.[29] The applicant is not obliged to show prior use of his mark in order to apply for and

---

[25] M. Boguslavsky and I. Cherviakov, *op. cit. supra* note 9, p. 48. These Decrees also contained other provisions governing the registration and use of trademarks which were incorporated in the present Law of June 23, 1962.

[26] See Appendix B, "Union of Soviet Socialist Republics Law Concerning Trademarks," Art. 2.

[27] *Id.*, Art. 4.

[28] (Time period is calculated from date of receipt of application by the Committee), *Id.*, Art. 19 and 20.

[29] *Id.*, Art. 25.

receive a registration.[30] However, where there is a dispute over several applications on file for similar or identical marks, registration may be granted to the first applicant as determined by the date his application was received by the Committee.[31]

Soviet law includes protection for service marks.[32] Thus, in line with Paris Union Convention principles embodied in the Lisbon Revision of 1958, the law provides for protection of marks used to identify services as well as to distinguish goods. "A trademark or service mark" is defined as "an artistic representation, original in its form" and can consist of "original names and words, separate combinations of letters and figures, vignettes, different forms of packaging, artistic compositions and drawings whether combined or not with letters, figures, words etc. . . ."[33] Not registerable as trademarks are "marks commonly used to denote goods of a well-known kind (free marks)", marks which constitute national emblems and insignia; marks of international organizations, including the Red Cross and Red Crescent; business-type summary information about the product and the applicant; marks containing false or misleading information about the manufacturer or geographic origin of the product; marks "contrary to the public interest or the requirements of Socialist morality," and marks which conflict with international conventions to which the USSR adheres.[34]

Filing and Registration Particulars

The USSR Chamber of Commerce's Patent Bureau generally handles all filing and prosecution actions for foreigners' applications.[35] It requires an appropriate power-of-attorney and also collects the various fees charged by the government in addition to its own agent fees.

Since the USSR has ratified the Paris Union Convention, a trademark owner in the United States or any other Convention country is

---

[30] *Id.*, Art. 9. (This article details the required documentation but mentions no need of evidence of prior use.)

[31] *Id.*, Art 11, para. 1.

[32] Service industries in the USSR have reportedly received far less attention, so far, than industrial and consumer goods production industries in governmental planning operations. The government has, however, announced plans to increase capital investment in the services sectors.

[33] *Op. cit. supra* note 26, Art. 1, para. 1.

[34] *Id.*, para. 2.

[35] Details on filing procedures and fees can be secured by writing to the Bureau at 6 Kuibyshev Ul., Moscow.

entitled to claim a six-month "right of priority" therein after a first filing of his trademark application in another Convention country.[36] Soviet citizens of course have the same "priority rights" in the United States and other Convention countries on the basis of USSR Convention membership. The filing date of a foreigner's application in the USSR is determined by the date it was received by the Committee.[37]

Applications are subject to examination, and, if refused, the applicant is entitled to an administrative appeal.[38] There are no provisions for opposition. An application shall be refused if the mark applied for is similar to one already registered in the same class of goods or to one which is the subject of a previous application in the USSR on which a decision has not yet been made.[39] If the application is acceptable to the Committee, the trademark is recorded in the State Register of Trademarks and a certificate is granted entitling the registrant to the exclusive right to use of the mark.[40] Soviet law provides a preliminary examination system to persons desiring to know if their trademarks are registerable before they decide to file formal applications. Upon request by such person the Committee may examine his mark and then certify whether it is suitable for registration. If the applicant is informed that he is entitled to the registration, the searched mark may be reserved for him for three months, after being so informed. If he fails to apply for it within that period, the mark (or one similar to it) may be registerable to another applicant.[41]

Classification Procedures

The Soviets have established a classification system for trademark registrations.[42] It consists of product classes, one through 34; and service classes, 35 through 42. The classes are comparable to those in the present "International Classification for the Registration of Trademarks" adopted by an Arrangement at Nice which came into force April 8, 1961. The USSR is not a party to this Arrangement although applying the same system. A separate application must be filed in the USSR for each class of goods.[43]

---

[36] *Op. cit. supra* note 26, Art. 11, paras. 2, 3, and 4.
[37] *Id.*, Art. 11, para. 1.
[38] *Id.*, Art. 16.
[39] *Id.*, Art. 15.
[40] *Id.*, Art. 17.
[41] *Id.*, Art. 18.
[42] *Id.*, Art. 8.
[43] *Id.*, Art. 9, para. 2.

Infringement Actions

The law prohibits the use of a trademark without the registrant's consent and enables him to seek injunctive action against its unauthorized use and damages for infringement.[44] Infringement action can presumably be taken against unauthorized use of a mark on imports. Civil lawsuits, including those on trademark infringements, are apparently within the jurisdiction of District (City) People's Courts unless a higher court (i.e. Moscow City Court or the Supreme Court of a Republic) decides to have a case referred to it as the Court of First Instance. So far as can be determined, U.S. nationals reportedly have the same benefits as Soviet nationals in exercising rights under USSR judicial procedures. The USSR Civil Code, which provides for indemnification of property damages, is also applicable in the case of trademark infringement.[45] Few trademark infringement suits appear to have been filed in the USSR in recent years.[46] Infringement of trademark rights may also be subject to penal action under the USSR Criminal Codes.[47]

Transfers, Assignments and Licenses

Exclusive rights to a trademark may be transferred from one enterprise to another upon reorganization, or by assignment from one party to another, in which case the existing registration is voided and a new one issued in the new proprietor's name. Transfer agreements must be registered with the Committee to be legal.[48]

---

[44] *Id.*, Arts. 4 and 21.

[45] M. Boguslavsky and I. Cherviakov, *op. cit. supra* note 9, p. 62-65.

[46] In a prominent case two years ago involving a foreign mark, the Belgian-West German firm, Gevaert-AGFA N.V. of Antwerp, was subject to an infringement suit as a result of its use of AGFA in a Soviet trade fair. The suit was brought by an East German firm, Volkseigener Betrieb (VEB) Filmfabrik Wolfen, which had acquired an AFGA registration in the USSR in 1955. The Moscow City Court ruled in the case in January 1966 that Gevaert-AGFA could not use its name in the USSR because AGFA had already been registered there by the East German firm. The Soviet Supreme Court upheld this verdict in a decision of April 28, 1966. (Reported in *The Journal of Commerce,* [April 29, 1966]).

[47] For example, the Criminal Code of the Russian Soviet Federative Socialist Republic (§155) provides that "illegal use of a trademark belonging to another person is punishable by reformatory labor for a period of not more than six months or by a fine of not more than 300 rubles." ("BIRPI East-West Industrial Property Symposium," *op. cit. supra* note 8, p. 187; also, M. Boguslavsky and I. Cherviakov, *op. cit. supra* note 9, p. 68).

[48] *Op. cit. supra* note 26, Arts. 22 and 23 (para. 3).

A trademark registrant is permitted to license his mark. Licensing agreements, which also must be registered with the Committee to be legal, must contain commitments by the parties that quality standards not inferior to those of the licensor will be maintained on the goods bearing the licensed mark.[49]

Any amendments to the registration certificate, including designation of the registrant, changes in classes to be covered, and basic changes in the trademark itself must also be registered with the Committee.[50]

Other Major Characteristics

There is no requirement in the law for a registered mark to be used, but it would seem that most marks are registered in the USSR with the expectation of their eventual, if not immediate use. Trademark registrations, renewals, transfers, licensing, amendment and annulment actions are required to be entered in the State Register of Trademarks and are published by the Committee in its *Official Bulletin of Inventions, Trademarks and Designs.*[51]

The law contains a reciprocity provision for foreign nationals, i.e., it applies only to those foreigners whose countries extend national treatment to Soviet citizens under their trademark laws.[52] This reciprocity provision, however, is no bar to United States filings, since our trademark law, as mentioned earlier, makes no distinction as to nationality so far as rights of applicants to file for and secure registrations are concerned. Also, the principle of national treatment is established in the Paris Union Convention.

In the USSR, a State production or service enterprise can own one mark for use on all of its goods or services or a separate one for use on each type of product it sells or type of service it renders. Also, a Soviet commercial enterprise may use its own trademark on all of its documentation and may use the mark in place of or together with the trademark of the manufacturer on goods handled by it or made to its special order.[53] Goods manufactured by State enterprises must bear a trademark before they can be sold (see footnote 25).

The present Trademark Law was approved by the Committee on

---

[49] *Id.*, Art. 23.
[50] *Id.*, Art. 24.
[51] *Id.*, Art. 26.
[52] *Id.*, Art. 27.
[53] *Id.*, Arts. 5, 6, and 7.

June 23, 1962, amended on May 4 and 19, 1965, to reflect changes needed to implement the Paris Union Convention, and on March 31, 1967, to further clarify its provisions on transfers of trademarks.

Conclusion

In the USSR, where the distribution of goods and services is subject to a system of State directives, trademarks have served primarily as symbols of identification for guarantee and quality control purposes. They have played a lesser role as tools for marketing, business promotion and "good will" development. Nevertheless, American businessmen interested in Soviet trade might consider applying for trademark registrations in the USSR for a number of reasons. The trademark registered in accordance with the law will thereby become a legally recognized form of protection subject to enforcement against unauthorized imitations, including those on imported goods. Also, such marks will be useful focal points around which to develop any market promotion that can be accomplished within the limitations of the Soviet system. Furthermore, such registered marks, entitled to exclusive use under Soviet law, will provide important identification for a firm's products imported into the USSR. Trademark registrations will also facilitate conclusion of licensing agreements in those product areas where "package deals," including licensing of patents and technical know-how, as well as trademarks, may be the only type of arrangements that can be negotiated.

The USSR has Westernized its Trademark Law and is participating in the world "Union" of countries that abide by internationally accepted principles of patent and trademark protection. So far, there is little experience in which to determine how successful American firms will be in protecting their rights in that country. The American businessman will have to consult carefully with his attorney and licensing advisor for guidance on the procedures to be followed in acquiring and maintaining the fullest possible protection available under Soviet law.

It is possible that disputes concerning trademark matters that might be involved in an overall foreign trade transaction could be decided through arbitration procedures rather than the courts. The Foreign Trade Arbitration Commission of the USSR Chamber of Commerce in Moscow is the arbitral body in that country. Western firms, however, have been known successfully to resist Soviet enterprises' requests for arbitration in Moscow and have been able to agree, in a

number of instances, upon arbitration in the country desired by the Western party.

About 17,000 trademarks are reportedly now registered in the USSR (Table 1). While this overall figure is small compared with the numbers of trademarks registered in the United States and many other industrialized non-Eastern European countries, the number of applications filed, and registrations granted in the USSR from foreign sources has increased in recent years. U.S. nationals reportedly had about 500 trademark registrations in that country as of October 1, 1965.[54] Any increase in U.S. filings is undoubtedly attributable to anticipation of better trade opportunities, the greater flexibility in licensing provided by the new law, and adherence by the USSR to the Paris Union Convention. In the past, many U.S. marks were filed through, and in the name of, Western European subsidiaries of U.S. firms to take greater advantage of trading opportunities. In recent years however, more U.S. firms have become interested in filing directly in the USSR.

Table 3 shows U.S. filings in 1965 and 1966 in the USSR and other Eastern European countries as compared to filings in leading Western countries on a regional basis, where figures are available. Although U.S. filings in the USSR may be far below those for other leading trading countries, the Soviet government's increasing emphasis on consumer goods production, the growing market potential in that country for imports, and its adherence to the Paris Union Convention, may change this picture considerably in the next few years.

---

[54] U.K. nationals reportedly had 417, Italy 209, France 189, West Germany 143, Switzerland 110, East Germany 927 and Czechoslovakia 248, as of this date. (M. Boguslavsky and I. Cherviakov, *op. cit. supra* note 9, p. 53).

TABLE 1

TRADEMARK REGISTRATIONS IN FORCE IN SELECTED COUNTRIES IN 1965 AND 1966
(LISTED BY DECLINING ORDER OF MAGNITUDE IN 1966)

	Total in Force End of 1965	Total in Force End of 1966
Japan	377,463	407,789
U. S.	339,360	344,550
Fed. Rep. Germany	251,431	257,459
United Kingdom	220,982	222,854
Canada	98,623	102,449
Netherlands	79,799	81,317
India	80,251	81,290
Sweden	54,543	56,865
Chile	48,828	54,081
Colombia	42,475	44,218
Czechoslovakia	29,653	30,832
Rhodesia	19,426	19,575
Syria	17,510	17,705
USSR	16,391	16,597
Lebanon	13,902	14,561
Israel	12,339	13,007
Philippines	9,419	9,961
Uganda	7,171	7,650
Hungary	5,664	5,856
Yugoslavia	4,329	4,613
Bulgaria	3,947	4,366

Source: *Industrial Property, op. cit. supra* note 2 (Statistical Annex, No. 12, December issues for 1966 and 1967).

TABLE 2

TRADEMARK APPLICATIONS FILED IN, AND REGISTRATIONS GRANTED BY THE USSR (1965 & 1966)

	1965		1966	
	No. Applications Filed	No. Registrations Rec'd.	No. Applications Filed	No. Registrations Rec'd.
By Foreign Nationals from:				
Austria	na	na	6	0
Belgium	na	na	14	4
Canada	0	3	2	0
Cuba	1	1	2	0
Czechoslovakia	16	13	26	19
Denmark	2	1	17	2
Finland	3	0	2	0
France	24	34	19	20
Fed. Rep. Germany	137	0	280	199
East Germany	56	68	41	46
Hungary	1	5	1	1
India	na	na	1	0
Ireland	na	na	1	1
Italy	11	7	14	6
Jamaica	1	0	0	1
Japan	40	27	36	33
Netherlands	19	4	40	21
Norway	5	0	2	5
Panama	na	na	1	0
Poland	na	na	2	0
South Africa	2	2	1	2
Spain	na	na	2	0
Sweden	6	4	10	6
Switzerland	95	20	61	92
United Kingdom	165	46	77	146
United States	83	56	79	60
Others	0	1	3	1
Total Filings by Foreign Nationals	668		740	
Total Registrations Received by Foreign Nationals		292		665
Total Filings by USSR Domestic Nationals	4356		1862	
Total Registrations Received by USSR Domestic Nationals		2219		765
Total Filings and Registrations in USSR (Foreign and Domestic Nationals.)	5024	2511	2602	1430

Source: *Industrial Property, op cit. supra* note 2 (Statistical Annex, No. 12, December issues for 1966 and 1967).

TABLE 3

UNITED STATES TRADEMARK APPLICATIONS FILED IN SELECTED COUNTRIES
(BY NUMBER OF FILINGS IN 1965 AND 1966)

Country of Filing	1965	1966
Eastern Europe		
USSR	83	79
Poland	65	104
Rumania	na	
Hungary	84	146
Czechoslovakia	43[1]	48[1]
Bulgaria	57	72
Yugoslavia	109	106
Western Europe		
United Kingdom	1962	2032
France	1771	632
Germany	1626	1510
Netherlands	957	1001
Belgium	842	846
Sweden	871	909
Switzerland	715[1]	649
Norway	579	657
Austria	522	525
Canada	2340	2521
Latin America		
Chile	1022	1191
Venezuela	945	1275
Colombia	389	496
Far East		
Japan	2607	2378
New Zealand	610	764
India	443	468
Thailand	332	481
Malaysia	226	276
Ceylon	97	148
Pakistan	247	237
Philippines	285	591
North Africa and Middle East		
Israel	355	389
Lebanon	302	267
Iran	194	237
Morocco	151	169
United Arab Republic	161	198
Africa (Other)		
South Africa	988	1002
Rhodesia	198	214
Sudan	98	179
Ghana	115	133
Uganda	114	153

[1] Registrations

Source: *Industrial Property, op. cit. supra* note 2 (Statistical Annex, No. 12, December issues for 1966 and 1967).

APPENDIX A

THE EARLIER USSR TRADEMARK LAW OF 1936 (SUMMARY)

The earlier Soviet Trademark Law of 1936 established two classes of marks—production marks and trademarks. A production mark was obligatory on all manufactured goods, their containers or wrappers, and had to show the factory's name, location, State agency in charge of the factory, quality of its goods and its standard number. Certain factories producing military type goods were exempted from this requirement to avoid disclosures for security reasons. The other class of mark—the trademark—was an industrial property right similar to that afforded by the U.S. and other Western industrial property laws. Adoption of a trademark by a factory or other producing enterprise to distinguish an article was voluntary. Marks not registrable were those confusingly similar to marks already registered, those containing false or misleading connotations in relation to their goods, those simulating the Red Cross or Red Crescent and those too generally descriptive of the goods for which they were intended. Trademarks could be "graphic images, original names, combinations of letters, etc.," and different marks could be used for different goods or the same mark for all goods produced by a factory. An enterprise, such as an exporting entity, dealing with goods produced by others, was also permitted to have and to use in connection with its sales, its own mark.

The trademark registration system was originally decentralized into three categories—the People's Commissariat for Heavy Industry registered all marks used on machines, tools, building supplies and chemicals; the Commissariat for Public Health registered all marks used on medical supplies and instruments; and the Commissariat for Internal Trade registered marks used on other classes of goods. In 1959, the registration system was centralized in the State Committee for Inventions and Discoveries which, today, administers the patent and industrial design laws, as well as that on trademarks. The earlier trademark law contained no use requirement but conditions were such that once a mark was registered it was put to use. The law permitted the owner of a registration to sue for infringement against unauthorized use of his mark on imported as well as on domestically manufactured products and to seek injunctions and recover damages in infringement cases. Action could also be sought to invalidate a registration.

Under the 1936 law foreigners could register their marks in the USSR only if their home countries extended the benefits of their trademark laws to Soviet nationals. This was no bar so far as United States nationals were concerned since our trademark law makes no distinction as to nationality and enables a Soviet or any other national to apply for and receive trademark protection. The Soviet law also required a foreign applicant to have a prior home registration for his mark before it could be registered in the USSR. Registration was issued only for a term not exceeding the home registration.

APPENDIX B

UNION OF SOVIET SOCIALIST REPUBLICS[1]

Statute on Trademarks

Approved by the Committee for Inventions and Discoveries
Attached to the Council of Ministers of the USSR
on June 23, 1962, as amended up to March 31, 1967

---

[1] BIRPI translation. Revised version of texts published in 1965 and 1966, incorporating changes partly in the legislation and partly in the translation.

Source: *Industrial Property, op. cit. supra* note 2, No. 6 (June 1967), pp. 133-136.

1. — A trademark or service mark is an artistic representation, original in its form (original names and words, separate combinations of letters and figures, vignettes, different forms of packing, artistic compositions and drawings whether combined or not with letters, figures, words, etc.), used to distinguish goods or services of one enterprise from similar goods or services of other enterprises, and to advertise them.

The following shall not be used as trademarks and cannot be accepted for registration:

(a) marks commonly used to denote goods of a well-known kind (free marks);

(b) State insignia, facsimiles, seals, stamps; control, guarantee or other marks; emblems of international organizations without the consent of the appropriate bodies; or marks containing a representation of the Red Cross or Red Crescent;

(c) representations consisting exclusively of a text containing information concerning the time of manufacture of the goods, the address of the enterprise, price, quantity, size, etc. Where such information is additional to the basic representation of a mark, only the basic representation may be registered as a trademark, without the text. The text may be used together with the trademark but not as part of the representation of the mark itself;

(d) representations containing false information, or information capable of misleading a purchaser, concerning the manufacturer or the place of production (origin) of the goods;

(e) representations contrary to the public interest or the requirements of Socialist morality;

(f) representations conflicting with international conventions to which the USSR is a party.

2. — Every trademark, before it is used in the USSR, shall be subject to compulsory State registration with the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR, in accordance with Decree No. 442 of the Council of Ministers of the USSR, of May 15, 1962, "Concerning Trademarks."

3. — Trademarks cannot be used for liquid, gaseous, or loose and unconsolidated substances supplied or sold without packing, or for other goods exempt from all kinds of marking in accordance with State All-Union Standards (GOST) and Technical Specifications.

4. — An enterprise shall be entitled, in the territory of the USSR, to the exclusive use of a trademark or service mark registered in its name. The use of a trademark or service mark without the consent of the enterprise in the name of which it is registered is prohibited.

5. — An enterprise (organization, or production associations thereof) shall be entitled to possess a single trademark (service mark) for all the goods it markets or all the services it renders, or to use different marks for various kinds of goods or services.

6. — An enterprise may also place trademarks or service marks registered in its name on technical drawings, prospectuses, invoices, forms, labels, and other documentation accompanying goods or connected with their distribution operations.

7. — A commercial enterprise (organization) shall have the right to place its own trademark instead of or beside the trademark of the manufacturing enterprise on goods marketed by it and manufactured to its special order (according to models, special formulae and prescriptions, etc.). The same right shall be granted to foreign-trade organizations in respect of goods marketed by them.

8. — Trademarks and service marks shall be registered for a definite class of goods (services). The same mark may be registered for different classes of goods (services) in the name of one enterprise (organization).

9. — State registration of trademarks and service marks shall be carried out by the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR on the basis of applications filed by enterprises (production associations of enterprises) and by organizations either directly or through agents duly authorized for the purpose. An application for registration of a trademark filed through an agent must be accompanied by a signed power of attorney in the prescribed form. Powers of attorney executed abroad must be duly legalized in consular offices of the USSR unless such legalization is not required by virtue of international treaties.

A separate application must be filed for each class of goods for which a trademark (service mark) is to be registered.

The application shall comprise the following materials:

(a) two copies of a declaration stating the full designation and postal address of the enterprise (organization) in the name of which the trademark is to be registered, and also the duration of the trademark registration;

(b) two copies of a complete list of the goods for which the trademark is to be registered, together with an indication of the classes of the goods and the manner in which the mark is to be applied to these goods;

(c) twenty copies of a specimen and two copies of a description of the trademark;

(d) a receipt from the State Bank for payment of the prescribed application fee (2.50 roubles for each class of goods);

(e) one copy of a document certifying the subordination (or affiliation) of the enterprise.

If the trademark or service mark contains information concerning the origin of the goods, the applicant must append to the application one copy of an official document certifying the correctness of the information concerning the origin of the goods contained in the representation of the trademark.

10. — A trademark (service mark) submitted for registration in color shall be registered and protected only in that color. A trademark (service mark) submitted for registration without indication of color shall be registered in black and white and may be used in any color unless it repeats a similar mark registered in a specified color.

A trademark (service mark) of similar representation may not be registered in other color combinations for other goods of the same class in the name of other proprietors.

11. — The date of priority of an application for a trademark (service mark) shall be the date on which the application is received by the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR. Applications may be sent by registered post. In case of dispute, the date of application shall be deemed to be the date of dispatch as fixed by the postmark, and for foreign applicants the date of dispatch to the Committee by a patent agent domiciled in the USSR.

In the case of nationals of foreign countries and foreign legal entities, the priority of an application for a trademark, in conformity with the International Convention to which the USSR is a party, shall be established as the date of priority of the first lawfully valid application filed in a country which is also a party to the said Convention, provided that the application is filed in the USSR within a period of six months after that date.

Any person who wishes to avail himself of the priority established in accordance with the International Convention shall immediately, upon filing the application,

make a statement to that effect, and shall indicate the date of priority and the country where the trademark was first filed.

The requisite certified copy of the foreign application and all other materials necessary for establishing the date of priority may be furnished subsequently, but not later than three months from the date of filing of the application in the USSR.

The priority of an application for a trademark used on exhibits displayed in international exhibitions organized in the USSR shall be determined by the date on which the exhibit is put on display in the exhibition, provided that the application is filed not later than six months after that date.

12. — The Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR shall examine all applications received in order to ascertain that the documents comprised in the application and the representation of the trademark (service mark) submitted for registration satisfy the requirements of this Statute.

13. — The Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR shall be entitled to require an applicant to submit the additional materials necessary for its decision concerning the registration of the trademark (service mark).

If the applicant does not submit the required additional materials within three months from the date on which he receives the request of the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR, the application shall not be considered.

14. — The Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR shall notify the applicant of the decision concerning registration of the trademark (service mark) within one month from the expiration of a six-month period after the date of filing of the application or of receipt of the required additional materials.

In the event of refusal to register the trademark, the decision, together with the grounds therefor, must be communicated to the applicant within three months from the date of filing of the application or the date of receipt of the required additional materials, and, if the refusal is based upon the application of a national of a foreign country or a foreign legal entity, benefiting from an earlier priority in accordance with the International Convention, within one month from the date on which the application is filed with the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR.

15. — The Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR shall refuse to register a trademark (service mark) if the mark for which application is made for a specified class of goods is similar to:

(a) a trademark (service mark) registered in the same class of goods in the USSR;
(b) a trademark (service mark) for which an application has already been filed in the USSR on which no decision has yet been made.

16. — An applicant who disagrees with a refusal to register a trademark (service mark) may, within two months from the date on which he receives the decision, lodge with the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR an objection with the grounds therefor. The objection shall be accompanied by a receipt for payment of the prescribed fee (2.50 roubles for each class of goods).

The Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR shall consider the objection within two months. The decision of the Chairman of the Committee or his Deputy shall be final.

17. — After reaching a decision to register a trademark (service mark), the Committee for Inventions and Discoveries attached to the Council of Ministers

of the USSR shall enter the same in the State Register of Trademarks of the USSR and issue to the applicant a certificate granting him the right to exclusive use of the mark.

Copies of the certificate granting the right to the exclusive use of the trademark may be issued only upon presentation of an official announcement of the loss of the said certificate published in the local press, and, in the case of an irrecoverable loss, upon presentation of documents confirming the loss of the certificate.

18. — An applicant may request the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR to conduct a preliminary examination of a trademark in order to determine whether its registration is possible. Such preliminary examination shall be conducted on submission of one copy each of the application, a specimen of the trademark, and a list of the goods in connection with which it is proposed to use the trademark, together with the receipt of the State Bank for payment of the prescribed fee (2.50 roubles for each class of goods).

If, within three months from the date of dispatch to the applicant of the positive conclusion of the preliminary examination of the trademark, an application for registration of the said trademark (service mark) has not been filed with the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR by the applicant, the mark (or marks similar to it) may be registered in the name of another applicant.

19. — Trademarks (service marks) shall be registered for the term specified by the applicant, but not longer than ten years calculated from the date of receipt of the application by the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR.

20. — The term of validity of the certificate granting the right to the exclusive use of a trademark (service mark) may be extended for not more than ten years each time. The term of validity of a certificate shall be extended on application filed by the proprietor during the last year of validity of the certificate, but not later than six months after the expiry of such term.

An application for extension of the term of validity of a certificate shall be accompanied by:

(a) the original certificate granting the right to the exclusive use of the trademark;

(b) a receipt from the State Bank for payment of the application fee (2.50 roubles for each class of goods);

(c) a receipt for payment of the publication fee.

21. — During the term of validity of the certificate granting the right to the exclusive use of a trademark, the proprietor of the certificate may demand, in the manner prescribed by law, the cessation of unlawful use of an identical or analogous trademark or service mark in connection with goods or services of the same class, and damages for any loss caused to him.

22. — The right to the exclusive use of a trademark (service mark) may be transferred from one enterprise (organization) to another upon reorganization, and/or on assignment of the trademark (service mark).

In such cases, the certificate granting the right to the exclusive use of the trademark shall be cancelled and a new certificate shall be issued in its stead in the name of the new proprietor, who shall submit to the Committee within three months:

(a) a notarized copy of the deed or other document concerning the transfer of the right;

(b) the original certificate granting the right to the exclusive use of the trademark;

(c) a receipt for payment of the prescribed fee (2.50 roubles for each class of goods);
(d) a receipt for payment of the publication fee.

23. — An enterprise (organization) in the name of which a trademark (service mark) is registered shall be entitled to grant a license for full or partial use of its trademark to another enterprise (organization).

A license may be granted only on condition that the license agreement provides that the quality of the goods of the licensee shall not be inferior to the quality of the goods of the proprietor of the trademark for which the mark was registered, and that the proprietor who has transferred the mark shall control the fulfilment of this condition.

The agreement to transfer the right to a trademark (service mark) or to grant a license must be registered with the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR.

Unless so registered, the agreement shall be invalid.

24. — Amendments to the designation of the proprietor of the certificate granting the right to exclusive use of a trademark (service mark), to the list of classes and goods protected by the certificate, and to the registered trademark (if amendments relate to certain elements of the mark and do not change its substance) are subject to compulsory registration with the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR.

To amend the certificate granting the right to exclusive use of a trademark the following documents shall be submitted:

(a) the request indicating the nature of the amendment;
(b) the original certificate granting the right to exclusive use of the trademark;
(c) a receipt for payment of the prescribed fee (2.50 roubles for each class of goods);
(d) a receipt for payment of the publication fee (3 roubles);
(e) twenty photocopies of the trademark (if the mark is amended).

The request for amendment of the certificate shall be examined within three months from the date of its receipt by the Committee.

25. — The right to the exclusive use of a trademark shall lapse:

(a) on expiry of the term of its validity;
(b) in virtue of a declaration by the proprietor of the certificate waiving his right to use the mark;
(c) on liquidation of the enterprise.

26. — A note of every registration of a trademark (service mark), extension of a term of validity, transfer of the right to a trademark, grant of a license, amendment referred to above in Article 24, and annulment of a certificate, shall be entered in the State Register of Trademarks of the USSR and published in the *Official Bulletin* issued by the Committee for Inventions and Discoveries attached to the Council of Ministers of the USSR.

The applicant shall pay 3 roubles for the publication of each of such notices, except for the notice of annulment.

27. — Foreign legal entities and nationals of foreign countries shall, subject to reciprocity, enjoy the rights provided under this Statute on equal terms with enterprises and organizations of the USSR.

The Global Exchange of Patents: An Analysis of Patent Statistics

D. A. WAS*

INTRODUCTION

FOR SOME YEARS BIRPI has published[1] detailed data on the origin of patent applications and patents filed and granted annually in a large number of countries. These data allow an analysis of the export-import relations for the countries concerned and a comparison of the relative impact of such countries throughout the world. Hitherto the emphasis has been on comparison of the absolute figures for indigenous and imported inventions which, in my opinion, are only indicative of the work *spent* and to be *spent* on patent applications embodying such inventions, and say very little about the actual situation confronting trade and industry. A few examples may illustrate this.

For the year 1965[2] Brazil reports 10,000 indigenous patent applications filed and a maximum number of inventions exported—to the

* Dr. D. A. Was (Shell Internationale Research Maatschappij N.V.) is Group Advisor on industrial property of the Royal Dutch/Shell Group of companies.

[1] Prop. Ind. 82, 1966, Annexe au No. 2, 2-9; Annexe au No. 12; Prop. Ind. 83, 1967, Annexe au No. 12.

[2] Prop. Ind. 82, 1967, Annexe au No. 12.

United States—of 33 only. This suggests that a large proportion of these filings are of local importance only or of no importance. At the other end of the scale a country like the Netherlands shows an export rate of over one half. Here various factors are at work. The most important is the degree of sophistication of the country's research and development, but of considerable importance also is the fact that in large markets, of which the United States is the most outstanding example, it is thought worthwhile to seek protection for the "small fry" as well. The costs and difficulties met in obtaining patents also constitute a contributing factor, as do various national idiosyncrasies. In the last category the systems aiming at stimulating the inventor, as distinct from giving an incentive to industrial R&D, are noteworthy. In German professional circles figures of one-quarter to one-third have been quoted as the proportion of indigenous patent applications filed for the sole purpose of settling the issues pursuant to the inventors' remuneration law. One can imagine that a similar phenomenon occurs with the system of inventor's certificates; certainly, the low percentage of grant indicates as much for the USSR.

For these reasons a distinction will be made in this report between the national (alleged) invention and the "international invention," the latter being that which is exported to at least one other country. Only those inventions are exported with which the applicant is relatively satisfied in terms of potential economic value and validity, more satisfied at any rate than he could be at the moment of first filing in his own country. Mortality sets in immediately after first filing; analyses of U. S. data[3] have revealed that if in a critical period of two years from the completion of an invention the latter has not reached the stage of practical development, its chances of succeeding at all have already been reduced to less than 1 in 20. This does not mean that mortality has no effect on filings effected abroad, but statistically it is legitimate to correlate the innovation process to such filings, rather than to the indigenous filings, the first category having been subjected to "Convention selectivity."

The relevant patent data should be judged by a suitable criterion; until now inventive capacity has been expressed as the number of indigenous applications or patents per capita, which is not very informative, not only for the reasons given above, but also because the degree of sophistication of a country's R&D cannot be assessed in this

[3] B. S. Sanders, "Speedy Entry of Patented Inventions into Commercial Use," *PTC J. Res. & Ed. (IDEA)*, Vol. 6, No. 1 (Spring 1962), p. 88; cf. also R. T. Dorl, *Strategy for Patent Profits,* Noyes Development Corp. 1967, p. 85.

way from these data. While the relative sizes of national industries in the national economy are contained in such data, size and sophistication are not necessarily correlated factors. For this reason patent data will be considered here against the background of the relative output of the manufacturing industry. This criterion has been chosen since the manufacturing industry, together with the primary or extraction industries, is indicative of a country's industrial capacity, while the patent incidence in the primary industries is so low that it can be neglected statistically.

The currently available statistics show some gaps. Italy, Spain and Brazil, in particular, do not report filings per countries of origin; some others, e.g. Argentina and Guatemala, do not report filings but only report granted patents. The latter data are of little use because of the time gaps involved and the differences in the periods of grant between one country and another. Finally, some countries, e.g. Austria, Switzerland and the United Kingdom, do not make a distinction between Eastern and Western Germany. However, it has been found that these omissions do not materially affect the analysis.

Discussion of Method, Accuracy and Definitions

As explained in the introduction, the present analysis aims at injecting into patent statistics the element of inventive merit, and is based on one main assumption, viz. that inventive production and the international flow of innovating knowledge are related in the first instance to the number of inventions for which patent applications are filed abroad. This, obviously, is only an approximation. We will now discuss how far this assumption is justified, using the following two definitions:

> An international invention is an invention for which in addition to the indigenous patent application at least one corresponding patent application has been filed abroad.
>
> An international patent application is a patent application pertaining to an international invention.

The total number of international inventions from a particular country does not include meritorious inventions for which no international patent applications have been filed; it does include, however, inventions for which international patents have been filed, but which for various reasons lack merit. Obviously, these two factors compensate each other to a certain extent, but the following questions arise. First, can it be assumed that the degree of compensation is not influenced by

the origin of the inventions? In that case countrywise comparison will not be distorted quantitatively. Second, can it be assumed that the merit distribution over the category of international applications is not influenced by such origin? In other words, are our national samples qualitatively comparable?

As regards the first question there is no doubt that decisions to file abroad depend largely on the particular position of a given country, and are consequently not always identical to those taken in another country. The larger the home market in relation to the export of manufactured produce, the smaller is the tendency to export inventions, unless the latter is reinforced by special circumstances, e.g. economic domination of a neighbouring country. The United States is a typical case in point since the patent exports of this country are depressed by its own size, but inflated vis-á-vis Canada owing to its economic domination of that country. When the economic situation is different, i.e. when the export market grows in relation to the home market, it is to be expected that both compensating factors underlying patent export decisions will be modified accordingly. However, as these factors compensate each other the ultimate quantitative results will not be affected much. On the other hand, with countries like Canada or Austria the deflationary factor of home market size may disappear altogether, and the resulting patent statistics tend to become inflated. Where this is suspected to be the case, we shall draw attention when discussing the relevant data.

With respect to the second question raised, it may be said that, given a sufficiently large sample, merit distribution may not depend primarily on origin; there is no particular reason to feel that inventors in one country are apt to come up with better inventions than those in another country. It may be that owing to the nature—specialization, organization and competitiveness—of a particular country's research and development, its inventors are more prolific, but that need not influence merit distribution over the sample.

Consequently, I feel fairly confident in proposing my third definition:

> The number of international inventions of any given country is indicative of that country's innovation potential.

Implicit in this definition is the well-established fact that meritorious inventions are almost always subjected to patent treatment, since the risk of keeping inventions secret is too great. Obviously, this does not apply to fields which are explored under governmental control for military and/or prestige reasons. Although the fall-out of such research

may be considerable, this will appear in the patent literature at some later date when the secrecy has been lifted. This is one reason for including in the sample all applications filed abroad, whether they claim Convention priority or not. Another reason for doing so is that applicants, particularly U. S. applicants, sometimes and deliberately forego such Convention benefit, often for budgetary reasons. Obviously, this introduces an element of inaccuracy into the annual samples, as part of these will have originated from "premiers dépôts" filed more than a year earlier. However, as this effect is of a continuous nature, the inaccuracy will be of the second order of magnitude only.

In order to eliminate the factor of national size, necessary for the qualitative analysis of innovation output of a given country, we have correlated our data, as will be explained in more detail in the subsequent material, to the relative size of industrial activity of that country. This can only be done on the basis of product value in order to allow for the different specialization of national industries. This has led me to define what I shall call the I.I.Q.:

> A country's International Inventive Quotient is that country's share of the total number of worldwide international inventions in a given year, divided by its share in the value of globally manufactured produce of the preceding year.

Obviously, the year's difference in this definition corresponds to the Convention year. Apart from what has been said in the preceding paragraph, accuracy is affected by retarded first filing in the United States of America, because of its first-to-invent system. It is my impression that the average filing date in the United States is about a year later than that in countries with a first-to-file system; however, I judged it preferable to accept this inaccuracy rather than to speculate on the exact retardation due to the first-to-invent system.

As the required industrial data are not available for countries with a socialist economy, the world total taken does not include the share of these countries. This does not matter much as today their contribution to international innovation is still quite small.

Exports of innovation, as measured by the maximum number of patent applications filed from a given country into a single other country, are distinct from the aggregate of patent exports from such country to all countries, since the latter is also dependent upon the geographical extent of patent protection required. We have tried to express this latter aspect in two ways, firstly by indicating the

> total additional filing rate equal to all foreign filings beyond the preferred country of export, expressed as a percentage of those in that preferred country.

Secondly, we have introduced the I.E.Q.:

> A country's International Extension Quotient is that country's share of the total number of global foreign filings in a given year, divided by its share in the value of globally manufactured produce of the preceding year.

Again, countries with socialist economies are not included. One other, very minor inaccuracy is introduced by the underlying assumption that no case will be filed in any country without having been filed in the preferred country. This error affects also the measurement of the innovation potential. Another inaccuracy derives from the fact that foreign filings for the same invention do not all take place in the same year. I do not believe that this materially affects the conclusions. They are, however, affected by the absence of adequate import statistics for such important importing countries as Italy, Spain and Brazil. This means that about 33,000 should be added to the total measured imports (in 1965) of about 280,000 applications.

In considering the impact of international applications on the industry of a given country we have introduced the concept of "relative load":

> The relative load is the share of any country of the aggregate of—indigenous or allochthonic—international applications globally filed in a certain year, divided by that country's share in the value of globally manufactured produce of the preceding year.

Actually, the Convention year is not essential here, and one might have selected any future year; however, the indigenous applications as measured from filings in the preferred country were certainly filed in the home country during the preceding year (if not earlier). Similarly, the impact from abroad also results from patenting in the originating country in the preceding year. This year was therefore preferred as the basic year.

It would have been more correct to speak of the "potential relative load" in the preceding definition, as we are not dealing with granted patents, but only with patent applications filed. However, as the pertinent figures are only used for purposes of comparison, and as their absolute values have no significance per se and, moreover, as it is of little importance in the context of international inventions whether these applications emerge from the official examination as granted patents, or are found to be valid in registration countries, we feel justified in applying this simplification.

A final word may be said about the accuracy of the patent statistics as published. These are by no means perfect, e.g. when imports into

India in 1966 are totalled from the sources indicated the result is 4,450, not the figure of 4,535 actually given. The French data are worse, and occasionally include one country's data in a different country's column, e.g. in the 1951 list the Swedish import data for Norway and the Netherlands are attributed to Mexico and New Zealand. Such obvious errors are rendered fairly harmless by their very obviousness, but similar, less conspicuous printing errors may escape attention.

Export of Inventions

It will be necessary to consider the countries with socialist economies separately because their role in the international patent trade depends on a series of motivators different from those which apply to the rest of the world. Their share in this trade is very small indeed, accounting for not more than 5.7 percent of all "international inventions" and 3.5 percent of all exported patent applications. For instance, the USSR, which has over 100,000 registered indigenous inventions per annum, exported a total of 1,678 applications in our basic year 1965, as compared with an export of over 100,000 from the United States (this excludes exports to Italy, Spain and Brazil, which together can be put at least at 10,000) for 72,317 registered indigenous inventions.

A breakdown of international inventions is presented in Table 1, appended, which lists the countries in decreasing sequence of numbers exported. These are compared with the relative size of the manufacturing industry. For the latter, 1964 has been taken as the priority date of such inventions.[4] The following conclusions are found to emerge.

The 12 listed countries, which possess 85 percent of the world's manufacturing industry, contributed 95 percent of the international inventions in 1965. Judged per unit of manufactured product the pre-eminence of the small European countries, with the exception of Belgium, is obvious. Whereas this country, together with the United States and the United Kingdom, is close to the average (I.I.Q. = 1), Switzerland, the Netherlands, Sweden and Austria are considerably higher, as is Germany, in "relative international inventiveness." Italy and Japan are (still) below the average, France somewhat above.

[4] The number of applications filed abroad without Convention priority being claimed, where this is possible, is far from negligible, but cannot be separately analyzed; for fuller discussion see the preceding section.

The influence of geographical proximity in the preferred direction of patent exports is again obvious, which suggests that patent exports are mainly guided by the traditional trade pattern.

The extraordinary high I.I.Q.'s of Switzerland and the Netherlands may be due to the sophistication of the specialized industry in the former and the concentration of R&D of international groups in the latter. The I.I.Q.'s of Austria and Canada may be somewhat inflated because of the basic orientation of their economies to their much larger neighbours; if so, this should be borne out by an analysis of their global export policies in comparison with those of the others (see below).

It is clear that, apart from possible quality aspects which cannot be taken into account in this kind of analysis, but which have never been shown to exist anyway, the impact of U.S. patenting is due mainly to the size of that country's industry, far more, at least, than to a lead in sophistication. This fact should be kept in mind when discussing the alleged technological gap between the United States and Europe. To demonstrate this more clearly the pertinent data have been grouped in Table 2, from which it will be seen that the number of international inventions from the United States is surpassed by that from Europe. It will be interesting to follow the development of this "negative gap" over the following years.[5]

We must now turn to the geographical spread of patent exports, and Table 3 presents these in the same way as in Table 2. Here the relative predominance of Europe is again apparent.

In order to gain an insight into the exports of the 12 main exporting countries to countries other than the most preferred, all export data have been grouped in decreasing order of magnitude and subsequently broken down into three successive groups of ten target countries each, and the rest brought together in a remainder group. The average incidence of filings for each of the three groups (total applications divided by 10) has been calculated in relation to the export from any of the 12 main countries to the preferred country, which, obviously, has not been included in the first of the three groups. Finally, the total additional coverage over that in the preferred country has been calculated in relation thereto and the countries put in increasing order of that particular coverage. These data are represented in Table 4. Again these figures do not include exports into Italy, Spain and Brazil, for which—as has been said—no detailed data are available.

It will be seen that what has been said above about Austria and

[5] See also the section on "Trends."

Canada is confirmed by their low rank in the last column. Italy, with an I.I.Q. lower than that of Japan, is more than twice as active in extending its coverage geographically. Like the I.I.Q., which is indicative of the relative importance of national R&D, "total additional filings demonstrate the degree of international orientation of trade in patents." As in the case of I.I.Q., the United States lags behind the larger European countries, which, together with Belgium, appear to be very close together. Of the three top scorers in the list Sweden is somewhat inflated owing to the special position of its industry in the Scandinavian area; corrected for this effect its position would seem to be more similar to that of the United Kingdom.

Switzerland and the Netherlands also differ in the distribution of their export, the latter country covering a smaller area (20 countries) more intensively, the former aiming at a wider geographical coverage. This indicates that the patent policy of Switzerland, more than that of any other country, aims at protecting the export of Swiss-made products, and that, as might be expected, patents of Dutch origin serve more as instruments for the communication of technology, in view of the type of R&D in this country. A similar relation may be noted between Germany and the United Kingdom, two countries which also have identical total geographical extension ratios.

Table 5 presents a breakdown of the total export figures from Table 3 and a comparison between the relevant I.E.Q. and I.I.Q. factors. The difference between these quotients is indicative of the relative geographical extent of the filing of international inventions. It shows (last column) that, with the exception of Italy, an I.I.Q. either below average or inflated by "dominant neighbour" relations corresponds with a loss, and an above average I.I.Q. with a gain. In the latter category it can be noted that for all I.I.Q.'s from 1.0 to 1.6 the gains are small and of the same size, and for values of about 2 and over they are large. Whether this phenomenon is essential or accidental remains to be seen, but it seems not impossible that the R&D sophistication of industry may be paralleled by the international trading pattern.

In the above we have refrained from discussing in any detail the countries of lesser inventive potential. It may suffice to note that only four countries, Denmark (1,732), Australia (1,325), Lichtenstein (1,249) and Spain (1,148), attain figures for total exported applications of over one thousand, and together account for over one half of the category "Others." Obviously, Lichtenstein is an export country in the legal and not in the material sense.

Data relating to countries with a socialist economy are presented in

Table 6. Reference has already been made to the quantitative insignificance of these figures when compared with those of the 12 countries discussed before. The share of Eastern Germany is striking. An unexpected conclusion arises from the comparison of the additional filing ratio (Column 6) with the comparable data of Table 4 (last column). Not only do the figures cover the same range—from 180 percent to about 700 percent—but those for Eastern Germany are practically identical to those for Canada (inclusive of the quantitative figures). Apparently both countries are in a comparable position; their patent policies are determined by similar economic considerations. This picture may be supplemented by the fact that of the additional export ratio of 183 percent only 3 percent is directed to the USSR. It is unfortunate that no comparable data about the national manufactured products are available, which would have allowed us to calculate the pertinent I.I.Q. and I.E.Q. For detailed information as to the destination of patent exports, see below.

Import of Patent Applications

Imports are fully dependent on the policies of the exporters in the originating country, and before discussing the quantitative data attention must be given to the pattern of preferred destination of exports. Table 7 presents for the 12 major exporting countries the sequence of countries of destination in decreasing order of filing incidence. In order to obtain a coherent picture only 10 countries of destination have been listed, the exporting country itself and Italy, for which no import statistics are available,[6] being excluded. This "table of preference" demonstrates the influence of geographical proximity. Switzerland does not appear on four lists and Austria not even on seven; their places are taken by countries for which, in most cases, the affiliation—be it geographical proximity, language or tradition—is obvious. These considerations also explain the relatively low places on the preference list occupied by the United States and Japan. An unavoidable conclusion is that patent policy is conservative in that it follows existing trade patterns instead of anticipating future ones. The two countries just mentioned illustrate this particularly well, as by any standards the United States is easily the largest industrial nation as well as being the largest market, while Japan shows the highest rate of development

[6] Because of lack of pertinent data Spain and Brazil have not been included; it is possible that both would feature in the U.S. export list.

both for industrial production and for consumption.

When the median preference positions in the table are calculated the sequence is found to be the following: Germany, France, United States, United Kingdom—Italy should come in here—the Netherlands, Japan, Belgium and Canada, Switzerland, Sweden, Australia; the corresponding median statistical preferential sequence numbers are 2.0, 2.6, 3.0, 3.1, (Italy), 6.6, 6.7, 7.6, 8.1, 8.9 and 10.6 respectively.[7] As in such a calculation the countries of origin are included, no more than 11 countries can be included in the list if it is to be comparable with that given in Table 7. It follows that Australia replaces Austria, all the other countries being "countries of origin." So the export is mainly directed to the other "countries of origin" and the international patent traffic is for a major part guided by the relations between the 12 main producers of inventions. It should be noted that exports to socialist countries from these producer countries are not sufficient to bring any of the former into the preference lists.

When considering patent imports into the various countries, attention should also be given to the amount of indigenous applications[8] for "international inventions" as, roughly speaking, the aggregate of the two categories constitutes the potential patent position on international inventions confronting both the national industry and the importer. The pertinent data are to be found in Table 8. In considering these import data irrespective of origin, Italy, Spain and Brazil can be incorporated in the analysis, as only the first has to be estimated and consequently the figures given cannot be far out. Because of its size the United States share has also been given, except in the case of Italy and consequently of the totals. The last column in this table presents the quotient of the share of the world total of applications filed for "international inventions" in any country and the relative size of that country's industry, representing the "relative load on the national industry," either in royalties to be paid or opportunities not available per unit of manufactured product. The differences are very substantial, ranging from one quarter of the world average for the United States to 4.6 times this average for the Netherlands. The only

---

[7] Again excluding Spain and Brazil.

[8] Although mostly filed a year or more earlier, for simplicity's sake the data for the year of export have been taken; cf. the section on Discussion of Method, Accuracy and Definitions.

countries close to this average are Germany, the United Kingdom and Japan.

A similar type of figure might be given for the "load from abroad;" taking a world average of one, the respective figures would be as follows:

United States of America	0.2	Australia	2.9
Germany	0.9	Canada	3.0
United Kingdom	0.9	Austria	3.7
Japan	0.9	Sweden	3.8
Italy	1.7	Netherlands	4.2
France	2.0	Belgium	4.4
		Switzerland	4.5

This demonstrates the importance of size; with increasing load figures the situation is actually worse than these figures indicate, the small countries are subject to selective filings based on the relative importance of inventions. Moreover, for these countries the omissions from imports of the less important or more speculative categories do not make life easier as their industry needs to be more geared towards export of industrial produce, and they will therefore meet those categories in their export markets.

These data on "relative load" should be kept in mind in discussions about deficits in balance of payments on intangibles; it is obvious that the quality and output of national R&D has very little influence and that the relative size of national industry is the controlling factor.

We may now consider what proportion of "available" foreign international applications is not imported into the various countries (the "escape factor") ; these data are the following:

United States of America	21%	Japan	54%
Germany	27%	Netherlands	68%
United Kingdom	28%	Belgium	68%
France	33%	Switzerland	73%
Canada	38%	Australia	73%
Italy	54%	Sweden	74%
		Austria	81%

When these figures are plotted against those of the relative size of the national manufactured product, it is found that, with the exception of the values for Italy and Japan, the ratios can be described by a pseudo-hyperbolic curve, which is the combined result of such semi-static relations as geographical proximity, trade and other relations, and competitive effort. This warrants the conclusion that the size of national manufactured product is a useful parameter for patent

imports into the various countries. On this basis it is found that the inflating influence of geographical proximity on the number of international applications is about one-fifth (U. S. figure corrected for the fact of Canadian proximity). In other words, one in five of the "international" inventions would not have been classified as such had it not been filed abroad for reasons of geographical proximity (inflation). Finally, it appears that Japan and Italy[9] are underdeveloped import countries; instead of an escape factor of 54 percent for both countries, 30 percent and 35 percent respectively should have been given.

Where industrial sophistication is low, escape factors must be expected to be higher; e.g. India and Mexico, both with national industries comparable in size to those of the small European countries, have escape factors of 89 percent and 87 percent.

Turning to the largest exporter, the United States, one finds that its influence in European countries (Table 8) is well below that in the country itself (47 percent), and also lower than corresponds with its export potential (41.3 percent of the global total, see Table 1).

However, the United States maintains a position at least as large as its home position, or even larger, in a number of countries: Japan (45), Australia (48), Argentina (46), Colombia (46), Guatemala (52), Korea (54), Venezuela (58), Philippines (63), Canada (68), Mexico (70). For some of these countries these figures seem to correspond with the U. S. share of material imports; all Latin America 41 percent, Japan 36 percent, Canada 70 percent, with Australia, however, out-of-line imports from the United States into the Australia-New Zealand area account for only 21 percent (statistics 1964). By comparison, U. K. material imports into that area account for one-and-one-half times the U. S. share, whereas United Kingdom patent imports into Australia come to only 20 percent, in New Zealand to 26.5 percent, as compared with the U. S. figure of 48 percent. Obviously, the U. S. excess in this case is due to their realization of Australia's industrialization potential.

The United States can only be compared with a unit of similar economic size and the nearest example is the European Economic Community. Assuming the existence of an European Economic Community patent as the only instrument for protection in that area, and further that the existence of such a patent would not increase filings

[9] The two countries with the lowest I.I.Q. in the list of the 12; this indicates the necessity of applying a correction to the conclusion that the relative size of the industry in the country of importation is the controlling factor.

from abroad, this area compares with the United States as set out in Table 9, which also gives the position of the E.E.C. if joined by the United Kingdom. The table shows that the patent position would be comparable only if the United Kingdom were to join. (These figures have been corrected for the present inflationary effect of geographical proximity within the E.E.C. area; the destinatory country of maximum export outside the E.E.C. having been substituted for that within that area where applicable). The higher indigenous share in the United States—47 percent as against 42 percent—is compensated by the greater E.E.C. + United Kingdom share in the United States—34 percent as against the figure of 30.5 percent for traffic in the opposite direction. The reason for these identical levels, existing despite the still substantial difference in the output of manufacturing industry, lies in the higher European average I.I.Q.

The data relating to exports from socialist countries are presented in Table 10, in which the first 11 countries of preference have been listed in a "preference list" comparable with that of Table 7.[10] It is significant that of the 77 positions on this list 59 are occupied by the "producing countries," whereas the socialist countries of origin only occupy 13 positions and others 5.

The export pattern from socialist countries is generally similar to that of the "producing countries." The differences, with one exception of perhaps political significance (the listing of the United Arab Republic), are due to the effect of geographical proximity, Austria and Switzerland being preferred to Canada and Belgium, respectively.

A remarkable feature is that notwithstanding geographical proximity and political and economic similarities the USSR preference list does not include any other socialist country nor is it in turn indicated by any of the others; no USSR invention was registered for patent protection in any other socialist country, whereas imports into the USSR only consisted of 171 applications from the German Democratic Republic, and 4 from Hungary. One-quarter of total exports of the group is directed towards Western Germany, of which two-thirds from Eastern Germany.

Trends

Unfortunately, older statistics cover only part of the data provided by BIRPI for the year 1965; even the BIRPI statistics for 1964 do not

[10] Twelve "producing countries" minus Italy, for which no data are available.

list imports into nineteen countries which do appear on the 1965 list, including the USSR, East Germany, Argentina, Belgium and Japan (although Nigeria and Vietnam have been omitted for 1965). Moreover, two successive years do not provide too good a basis for comparison. To discover trends use will have to be made of the data published under the editorship of the late Albert Colas by the French "Institut National de la Propriété Industrielle," covering the years from 1950 onwards[11] and comprising import figures into 23 countries of patent applications originating from 33 countries.

The data for the first year, 1950, cannot be used since they have been inflated by retroactive filing in Germany. Table 11 presents the numbers of international inventions, originating from the "producing countries" during the period 1951-1964, inclusive. As all these figures are rather difficult to digest, they are presented graphically in Chart I, appended, which classifies these countries in order of sequence as exporters. This chart shows at a glance that apart from some changing of relative positions in the first half of the 50's among the second echelon, the Japanese growth is the most striking feature from 1956 onwards; it looks as if Japan will surpass Switzerland in the 1967 figures and France perhaps three to five years later.[12] This would place Japan in the position to which its industrial potential already entitles it. However, figures for increases are more spectacular when one starts from a very low level than from a well-established position and, generally speaking, extrapolation of the data is extremely speculative, particularly in view of the remarkable irregularities in the annual increments, both for the individual countries and for the aggregate.

Taking the base year 1951 as 100, the increments are as follows: (for the whole period to 1965 inclusive; the corresponding figures for the first half of the present decade are given in brackets) :

Japan	2,510	(259)	Netherlands	193	(121)
Austria	327	(118)	Canada	186	(127)
Italy	276	(120)	United Kingdom	164	(121)
Germany	262	(131)	Belgium	160	(126)
France	251	(128)	Switzerland	157	(115)
United States of America	213	(123)	Sweden	2	(125)

This shows that in the 1960's volumetric increase is practically identical for all the countries concerned, with the exception of Japan;

[11] *La protection des inventions en France et à l'étranger* 1957, 1960 & 1965.

[12] This was written before BIRPI published the 1966 data; actually for that year Switzerland is leading Japan by only *one* application.

thus, there is a leveling with respect to the situation of the previous decade. Excluding Japan, the average increment for the first half of the present decade is 124 percent, as against 130 percent for the preceding five years, so the process is slowing down a little.

If we consider the different picture for the present and the previous decades, it is useful to relate the relevant data in the same manner as has been done in the preceding sections for the year 1965. In view of the rather irregular development during the first years of the previous decade, 1954 has been chosen as the starting year; it should, therefore, be noted that the comparison is between the last six years of the 50's and the first five years of the 60's. The pertinent information is given in Table 12 for the previous decade, in Table 13 for the present decade.

In considering these data, it should be borne in mind that rather spectacular changes took place in the geographical pattern of production, particularly in the 50's; the European countries[13] listed increased their share from 27.3 percent to 30 percent, United States + Canada dropped from 55.8 to 49 percent and all other countries increased from 16.9 to 21 percent (Japan + 1.4 percent). In the first half of the present decade the latter category showed an increase of only 1.2 percent, including a 2.5 percent increase for Japan. The other participants in that category consequently lost ground. The European countries listed remained stable (+ 0.2 percent), while United States + Canada dropped another 1.4 percent.

On the basis of these figures and the data given in the two tables, it becomes apparent that no direct correlation exists between growth of the national manufactured product and output of international inventions, unless a very pronounced positive or negative trend is indeed reflected in such output. A comparison of the relevant I.I.Q.'s, given

I.I.Q. for the year:	*1954*	*1960*	*1965*	
Austria	3.0	1.9	1.7	losing
Netherlands	3.3	2.8	2.6	
Germany	2.0	1.8	1.6	
Belgium	1.3	1.2	1.1	
Italy	0.8	0.6	0.6	
France	1.3	1.24	1.3	more or less stable
United Kingdom	1.0	1.0	1.1	
United States of America	0.8	0.8	0.9	
Canada	1.07	1.16	1.2	
Japan	0.3	0.66	0.8	gaining

[13] Excluding Austria and Sweden, for which no data are available.

below, yields more information:

The countries have been grouped together according to their positions in the development of these indicators. Sweden and Switzerland, for which no data are available, have been omitted, but they undoubtedly belong to the "losing" category as their relative shares of international inventions are 2.5, 1.9, 1.9, and 6.5, 5.5 and 5 percent, respectively. It has been shown above that the differences in the volumetric increase of international inventions were more pronounced over the period before 1960 than thereafter. Here it is shown that the main losers, the countries on the European continent except France, have reduced the downward trend (from −18 to −7 percent), those in the middle have started to gain (−1 to +7 percent), whereas the "gainer," Japan, is slowing down (+120 to +21 percent). The "invention data" for Sweden and Switzerland combined come into the first category (−14 and −7 percent).

It is significant that it is the high I.I.Q.'s which suffer the losses; those close to the world average appear more or less stable, and the gain has been achieved from a low level. Consequently, although the differences are still very noticeable, the trend is towards an equal distribution of the relative capacity for innovation throughout the invention-producing part of the world. The average 1965 I.I.Q. position for the three groups is 1.65, 1.0 and 0.8, respectively, as against 2.2, 0.9 and 0.3 in 1954 and 1.8, 1.0 and 0.66 in 1960.

Obviously, to take specific years as fully indicative of trends may be misleading; the actual I.I.Q. values for the three groups of countries have therefore been calculated for each year. These data are given in Chart II, which apart from the somewhat erratic nature of Japan's gaining curve, confirms the conclusions here presented. Japan could reach world average around 1970 if the extrapolation is justified, which it may well be, considering this country's present stage in the process of development. It should be noted that the "more or less stable" group, the aggregate of which is around the world average, includes France which is 30 percent above that average. As to the rest of continental Europe, it is unlikely that further reduction of the average I.I.Q. of 1.65 will lead to a value below the French level of 1.3. The differences within this group are appreciable (Switzerland 5.0, Italy 0.6).

As regards the geographical extension of patent exports, I shall spare the reader the full lists of data and shall instead present the additional relative coverage, expressed in percentages in Chart III. These figures include the extrapolations assumed in the reports

referred to. This, together with the fact that the figures relating to the latter year do not comprise such extrapolation, may be responsible for the lower figures at the right-hand end of the curves, which, consequently, do not present a downward trend.

The slow increase for the aggregate of the 12 "producing" countries conceals the faster increase of exports from the United States and Japan, two countries which are still considerably below the average. For the other countries the aggregate annual average over the period is, for practical purposes, constant, at 619 percent ± 11 percent. However, within this group significant differences can be noted. As is the case with Japan and the United States, the change over the years is somewhat erratic, and it seems therefore advisable only to compare the relative average over the period with that for 1965. The relative average is expressed in relation to that of the Netherlands, the highest in the period; in this way the difficulty involved in the fact that the statistics for this period are not on the same basis as those for 1965 can be eliminated. This comparison is presented in Chart IV, and demonstrates that as well as Japan and the United States all the small countries have enlarged, whereas all the larger European countries have relatively reduced the geographical extension of their patent coverage. The combined result of these two opposite trends explains the constant level for the 10 countries referred to above.

This leads to the question of the changes in the foreign filing policies of the countries during the period of investigation. Preference lists for the destination of patent exports have been made cf. Chart V. However, the complications presented by these graphs required further analysis, which has revealed the following. Generally speaking there is a trend towards stabilization of export policies in the second half of the period, although not for all countries. Comparing two half periods, 1951-1958 and 1958-1965, it is found that the total number of positional changes in preference lists of 12 countries has dropped by 30 percent and, more significant, positional changes involving three or more sequence numbers have decreased by twice that amount. While only one country, Belgium, increased flexibility, four showed the same number of positional changes, viz. the United Kingdom, the Netherlands, Canada and Austria, the two last-mentioned at a high level, which may be due to either flexibility or unstability. The other seven countries are responsible for the aggregate stabilization. Here the United States is an extreme case, in that it is the only country with fixed positions for the first three preference countries, Canada, the United Kingdom and Germany. The only other inflexible positions

are those of the United States and the United Kingdom on the Canadian list, the United States on the United Kingdom list, and Germany on the lists for Switzerland, Sweden and Austria, nine in all. For the second half period the inflexible positions increase to 24.

It is also noteworthy that no correlation exists between flexibility and geographical coverage; there is always at least one clear exception to any seemingly indicated correlation.

The most striking feature of the period investigated, apart from the general increase in international patent activity, is the rise of Japan as a major industrial state. It is worthwhile investigating how the other industrialized countries reacted to this. In general there is little difference between the sequence list of main exporters to Japan and that of their export potentials over the entire period 1951-1966, the main exception being that, owing to the inflated export potential of Canada to which reference already has been made, this country drops three places on the first sequence list. Of more interest is the relative rate of such exports, expressed as the proportion of each country's export potential and the spread of such figures over the period. This may be expressed as a quotient of two factors, the first representing the average ratio between actual exports to Japan and the corresponding export potential over the entire period, the second representing the ratio between the similar quotients for the second and the first part of the period. In order to obtain comparable data all figures have been expressed as a percentage of the highest figure. The quotient indicates the measure of priority attached to protection in Japan and the keenness with which such priority was given, and may therefore be styled the "priority keenness factor." See Table 14.[14]

Over the whole period only two countries, Germany and the Netherlands, have surpassed the United States in the ranking of Japan for patent exports; the former was also the keenest in establishing a patent position in Japan, being followed by the United States and the Netherlands, but has in the 60's dropped behind the other two. At the present time the importance attached to exports to Japan by France and Italy is below that by other European countries, and the annual figures show that Italy is reducing the relative amount of protection in Japan, whereas all the other countries concerned, led by the United States and the United Kingdom, are following the opposite policy.

Whereas the Eastern European countries, in view of their limited export potential, have not reached a high level on the Japanese import

[14] Austria and Belgium are not included as no data were available for 1961-1964.

list, it is worth noticing that when their exports are expressed in terms of potential, the USSR tops the list of all industrialized countries (1965: 0.73; United States 0.53); the other countries in this category can be compared with France and Italy.

Post Scriptum

When the above was almost completed the BIRPI data for the year 1966 appeared,[15] and could be used only incidentally. Although the data relating to one particular year only must be treated with due caution in drawing conclusions, the following may be worth noting. Japan continued to increase its exports of inventions, although somewhat less sharply than was anticipated (+9.5 percent). In this Japan was surpassed by Italy (+14.5 percent), and was followed rather closely by Sweden (+8.7 percent) and at some distance by France (+7.0 percent). With the exception of Austria all continental Western European countries increased their share, unlike the United States, the United Kingdom and Canada, which together declined by 5.6 percent. The only country which changed its preference was Belgium, which once again switched France and the Netherlands as the main country of destination.

The Eastern European countries together were only 2.4 percent up; this includes the USSR, which rose by 36 percent. In this category, Rumania and Yugoslavia substituted France and the USSR for Germany as preferred country of export; both countries showed lower exports. The aggregate increase of 2.4 percent compares with 2.2 percent for the Western industrial states plus Japan.

In view of the preferred destinations from the countries with lower export of inventions, the United States, the United Kingdom and Canada, it is interesting to note that total imports into the United States dropped by about the same number as corresponded with the lower figure of imports from the United Kingdom and Canada; when corrected for similar reductions of imports from the United States and the United Kingdom, imports into Canada were more than 10 percent higher.

We have already indicated that U. S. export data are inflated when measured in terms of imports into Canada, and that the same is true of Canadian exports to the United Kingdom. This is also borne out by the fact that the U. S. imports into other countries increased consider-

[15] Prop. Ind. 82, 1967, Annexe au No. 12.

ably notwithstanding lower theoretical potential; of the total increase of imports into such countries the U. S. share was for the United Kingdom 59, Germany 52, France 53, Japan 62, the Netherlands 69, Sweden 68, Switzerland 36, Belgium 74, Austria 19. In other countries with considerable imports (over 5,000 annually) these figures were: Australia 51 percent, Mexico 8 percent, South Africa 36 percent, Denmark 19 percent.[16] Again the low figure for Mexico points to inflation of exports due to geographical proximity. The significance of such annual increase figures may be seen from a comparison with those for the U. S. share of imports into these countries:

Country of Import	U.S. Share of Import	U.S. Share of Increase	Rate
United Kingdom	39	59	1.5
Germany	39	52	1.3
France	35	53	1.5
Japan	50	62	1.2
Netherlands	33	69	2.1
Sweden	32	68	2.1
Switzerland	24	36	1.5
Belgium	30	74	2.5
Austria	13	19	1.5
Australia	49	51	1.0
Mexico	63	8	0.1
South Africa	35	36	1.0
Denmark	24	19	0.8

Although definite conclusions cannot be drawn from comparison of two years only, the relevant data would seem to indicate a trend which deserves consideration in the European countries.

A remarkable decrease in patent imports has been reported by Spain (no details given), and by India (to be expected from the government's attitudes towards patent protection). This is in sharp contrast with the steep increase in the Eastern European countries, led by the USSR, where imports more than doubled. Traditionally led by France, the 12 invention-producing countries were responsible for 88 percent of the increased imports into the USSR, the two other main importers being Eastern Germany and, for the first time, Poland (now Number 10 on the list). Curiously enough, Western Germany in one year jumped from eleventh place on the list to second, whereas Eastern Germany fell from second to seventh. The beginnings of a race can obviously be detected here, the initial part of which may be expressed

[16] Spain and Brazil not known.

in terms of annual percentual increase as follows:

Poland	∞	United Kingdom	91
Germany	2,020	United States of America	90
Belgium	440	Italy	78
Netherlands	173	Austria	60
Japan	119	Sweden	50
Switzerland	104	Canada	29
France	92	Eastern Germany	−7

In return, the USSR increased the number of exported inventions by 36 percent, with the same additional geographical coverage as in 1965.

Conclusions

1. Of the two main trading groups in the world, those with liberal and those with socialist economies, the proportion of the latter in the worldwide flow of patents is still very small.
2. In the first category, 95 percent of international inventions originate from 12 countries, which together turn out 85 percent of the total manufactured product.
3. Per unit of national manufactured product, the small European countries, notably Switzerland and the Netherlands, show the highest number of international inventions; of the large industrial states only Germany has a considerable lead over the others (United States, United Kingdom, Japan, France and Italy).
4. The impact of U. S. patent exports is mainly due to the size of that country's industry.
5. European countries, headed by Sweden, Switzerland and Holland, extend patent protection to more countries than do other industrialized nations.
6. The pattern of exporting patents mainly follows the traditional orientation of economic interests.
7. Although patent exports from countries with socialist economies are fewer in number, their distribution shows a pattern similar, even in a quantitative sense, to that shown by exports from the countries with liberal economies.
8. Patent exports are mainly directed to the invention-producing countries (see 2 above) in accordance with traditional affinities. The only other important country of destination is Australia.
9. The impact of patent imports on national industries is mainly

dependent on the relative size of the latter; the level of national inventiveness plays a far smaller role.

10. A pseudo-hyperbolic relation exists between the size of national manufacturing industries and the proportion of potentially available imports which in fact are not imported. Two exceptions to this statistical relation are to be noted: as yet, Japan and Italy escape foreign protection to a considerable extent. This is, of course, also the case with countries with less sophisticated industries, e.g. India and Mexico.
11. The United States with its large export potential (about 40 percent of the world's total) fully exploits this in a number of non-European countries, particularly with respect to Australia, but not in Europe.
12. If the United Kingdom were to join, the EEC would be on a par with the United States notwithstanding the difference in industrial output. The reason for this is the higher European inventive yield per unit of manufactured product.
13. Since 1951 the relative positions of exporting countries have remained unchanged, except for the remarkable progress made by Japan; this country, which was still Number 12 in 1956, had risen to sixth place by 1963, an advance which is still continuing, albeit at a slower rate. In the present decade all the other countries have shown comparable relative increments in their number of international inventions.
14. However, if these trends are correlated to the relative changes in manufactured production, which appear to have been rather spectacular in the second half of the 50's, it is found that with the exception of France, which together with the United States and Canada has maintained its overall position per unit of manufactured product and has even shown a slight increase in the present decade, the European countries all show a drop, which, however, seems to be leveling out. It also appears that the size of the mutations is correlated to the absolute level of the individual positions; reduction of high levels, quasi-stability at average levels and rises in low levels (with the exception of Italy). Although the trends can be described as indicative of a process of leveling, there are as yet no indications that an average will be reached.
15. Analysis of the data pertinent to the geographical extension of patent exports shows a definite trend: Canada, Japan, United States and all the small European countries had a comparatively greater extension in 1965 than the average of the twelve-year

period covered by the French statistics (1951-1962); all the large European countries showed a decline.

16. It is also found that the pattern of geographical extension of patent exports is tending to become increasingly stabilized; there are, however, some exceptions, in particular as a result of the somewhat erratic changes occurring in the preference lists of Canada and Austria.
17. Germany, the United States and the Netherlands reacted most keenly to the industrial development of Japan; the two latter countries are currently directing over half of their patent export potential to Japan. Of the other European countries France and Italy lag behind the others, as do those of the Eastern bloc, with the exception of the USSR which gives a higher preference to Japan than any other industrialized country.
18. 1966, too, saw a considerable increase in patent exports, although those from the United States, the United Kingdom and Canada declined in number. When corrected for these lesser exports, imports rose everywhere, with the United States, Spain and India as notable exceptions; this rise was most spectacular in the USSR.

APPENDIX

TABLE 1
EXPORTED INVENTIONS BY COUNTRY OF ORIGIN

Country of Origin	Country of Destination[1]	Exported Inventions	% of Total	% of Manufactured Product	Exported Inventions Per Unit M.P.	I.I.Q.[2]
United States of America	Canada	19,844	41.3	44.7	434	0.9
Germany	France	7,534	15.7	9.9	761	1.6
United Kingdom	United States of America	4,479	9.3	8.7	515	1.1
France	Germany	2,954	6.2	4.8	615	1.3
Switzerland	Germany	2,388	5.0	0.9	2,168	5.5
Japan	United States of America	2,263	4.7	6.0	378	0.8
Canada	United States of America	1,695	3.5	2.9	583	1 2
Netherlands	Germany	1,391	2.9	1.1	1,264	2.6
Italy	France	1,033	2.2	3.8	272	0.6
Sweden	Germany	917	1.9	1.0	834	1.9
Austria	Germany	668	1.4	0.8	835	1.7
Belgium	Netherlands	586	1.2	1.1	532	1.1
Others	—	2,308	4.8	14.3	164	0.3
Total	—	48,060	100	100.	481	1

[1] For the purpose of counting exported inventions (in the form of patent applications) as distinct from the total of exported applications from a country of origin to all destinations, that country has been taken as normative in which the maximum number of applications emanating from such country of origin has been filed.
[2] "International Inventive Quotient" = Column 4 data divided by those of Column 5.

TABLE 2
EXPORT OF INVENTIONS FROM COMPARABLE GEOGRAPHICAL AREAS OF ORIGIN

Area or Country of Origin	Total International Inventions[1]	Share of Total	Share of Global Manufactured Product
United States of America	19,844	41.3%	44.7%
European countries listed in Table 1	21,950	45.7	32.1
(of which EEC[2])	(13,535)	(28.2)	ca. 21
All Others	6,266	13.0	23.2
Total	48,060	100	

[1] As measured by the numbers filed in the preferred country of destination.
[2] Luxemburg included.

TABLE 3
TOTAL PATENT EXPORTS FROM COMPARABLE GEOGRAPHICAL AREAS OF ORIGIN

Area or Country of Origin	Total Export of Patent Applications[1]	Share of Total	Share of Global Manufactured Product
United States of America	102,497	36.5%	41.3%
European countries listed in Table 1	155,154	55.2	45.7
(of which EEC[2])	(93,818)	(33.3)	(28.2)
Others	23,516	8.3	13.0
Total	281,167	100	100

[1] Excluding exports to Italy, Spain & Brazil.
[2] Luxemburg included.

TABLE 4
GEOGRAPHICAL EXTENT OF FOREIGN FILING ADDITIONAL TO PREFERRED COUNTRY OF DESTINATION

Country of Origin	I.I.Q. (Table 1)	Average in First Group[1] %	Average in Second Group[1] %	Average in Third Group[1] %	Relative Addition in remainder %	Total Additional Filings[2] %
Canada	1.2	12.5	3.3	1.1	11	180
Japan	0.8	23.1	2.8	0.8	5	272
Austria	1.7	28.8	4.6	1.6	3	353
United States of America	0.9	34.6	4.9	1.4	7	416
Belgium	1.1	45.0	7.7	2.4	17	568
France	1.3	43.6	7.6	3.5	22	569
Italy	0.6	44.3	9.1	3.1	23	588
United Kingdom	1.1	44.7	10.3	2.5	16	591
Germany	1.6	49.8	6.3	1.9	11	591
Switzerland	5.5	48.6	11.7	5.7	41	701
Netherlands	2.6	52.6	13.0	3.7	14	707
Sweden	1.9	57.2	11.7	2.3	9	721

[1] Group of 10 countries in order of decreasing incidence of filing.
[2] In relation to filings in the preferred country of destination.

TABLE 5
TOTAL EXPORT OF PATENT APPLICATIONS FROM MAIN PRODUCING COUNTRIES

Country of Origin	Exported Applications	Share of Total Export %	I.E.Q.*	I.I.Q. (Table 1)	Difference
United States of America	102,497	36.5	0.8	0.9	−0.1
Germany	51,538	18.3	1.85	1.6	0.25
United Kingdom	32,285	11.7	1.3	1.1	0.2
France	19,745	7.2	1.5	1.3	0.2
Switzerland	19,128	6.8	7.5	5.5	2.0
Netherlands	11,227	4.0	3.6	2.6	1.0
Japan	8,421	3.0	0.5	0.8	−0.3
Sweden	7,521	2.7	2.7	1.9	0.8
Italy	7,118	2.5	0.7	0.6	0.1
Canada	4,748	1.7	0.6	1.2	−0.6
Belgium	3,907	1.4	1.3	1.1	0.2
Austria	2,685	1.0	1.25	1.7	−0.45
Others	10,347	3.7	0.2 (6)	0.3 (3)	−0.07

* "International Extension Quotient" = data from third column divided by those from the fifth column of Table 1 (share of global manufactured product).

TABLE 6
DATA PERTINENT TO COUNTRIES WITH SOCIALIST ECONOMIES

Country	Inventions Registered	Inventions Exported	Preferred Country of Export	Total of Exported Applications[1]	Total Additional Filings[2] %	Share of Exported Inventions %	Share of Exported Applications %
USSR	102,365	274	France	1,678	512	9.4	14.5
Czechoslovakia	6,426	462	Germany	2,646	472	15.9	22.9
Eastern Germany	5,356	1,860	"	5,268	183	64.1	45.6
Poland	4,117	80	"	639	700	2.8	5.5
Hungary	1,438	94	"	639	580	3.4	5.5
Rumania	1,284	65	"	331	409	2.2	2.9
Yugoslavia	759	32	"	224	600	1.1	1.9
Others[3]		30		129	330	1.1	1.1
Total		2,897		11,554		100	100

[1] Excluding exports to Italy, Spain & Brazil.
[2] In relation to filings in the preferred country of destination.
[3] Mainly Bulgaria.

TABLE 7

COUNTRIES OF DESTINATION OF PATENT EXPORTS IN DECREASING SEQUENCE OF FILING INCIDENCE*

From	United States	United Kingdom	Germany	France	Italy	Switzerland	Netherlands	Sweden	Belgium	Austria	Japan	Canada
To												
1	Canada	United States	France	Germany	France	Germany	Germany	Germany	Netherlands	Germany	United States	United States
2	United Kingdom	Germany	United Kingdom	United Kingdom	Germany	France	France	United States	France	France	Germany	United Kingdom
3	Germany	France	United States	United States	United States	United Kingdom	Belgium	United Kingdom	Germany	Switzerland	United Kingdom	Australia
4	Japan	Canada	Switzerland	Belgium	United Kingdom	United States	United Kingdom	France	United Kingdom	United Kingdom	France	Germany
5	France	Australia	Austria	Netherlands	Switzerland	Austria	Japan	Norway	United States	United States	Canada	France
6	Australia	Japan	Belgium	Switzerland	Belgium	Japan	United States	Denmark	Luxemburg	Sweden	Netherlands	Japan
7	Netherlands	Netherlands	Netherlands	Japan	Japan	Netherlands	Sweden	Finland	Canada	Netherlands	Switzerland	Sweden
8	Belgium	Sweden	Japan	Canada	Netherlands	Belgium	Switzerland	Canada	Japan	Japan	Australia	Netherlands
9	Mexico	South Africa	Sweden	Luxemburg	Canada	Sweden	Australia	Japan	Switzerland	Belgium	Belgium	Belgium
10	Sweden	Belgium	Canada	Sweden	Austria	India	Austria	Netherlands	Sweden	Canada	Sweden	New Zealand
EXPORTING COUNTRIES NOT LISTED IN THE INDICATED DESTINATIONS												
	Switzerland Austria	Switzerland Austria		Austria	Sweden	Canada	Canada	Switzerland Austria Belgium	Austria		Austria	Switzerland Austria

* All countries not listed in the list of the 12 main "exporters" are underlined.

TABLE 8
"INTERNATIONAL APPLICATIONS" FILED IN VARIOUS COUNTRIES (1965)

Country	Indigenous International Filings	Foreign International Filings[1]	Total International Filings	Share of All countries %	Indigenous Share[2] %	United States of America Share[2] %	Share of Manufactured Product[3] %	"Relative Load" on National Industry[4]
United States of America	19,844	22,312	42,156	11.5	47	47	44.7	0.25
Germany	7,534	30,182	37,716	10.2	20	30	9.9	1.0
United Kingdom	4,479	31,232	35,711	9.7	12.5	36	8.7	1.1
France	2,954	30,284	33,238	9.1	8.9	30	4.8	1.9
Canada	1,695	28,239	29,934	8.2	5.7	68	2.9	2.8
Japan	2,263	21,127	23,390	6.4	9.7	45	6.0	1.1
Italy	1,033	21,700[5]	22,733	6.2	4.5	?	3.8	1.6
Netherlands	1,391	14,779	16,170	4.4	8.6	28	1.1	4.0
Belgium	586	15,044	15,630	4.3	3.6	27	1.1	3.9
Switzerland	2,388	12,459	14,847	4.1	16	20	0.9	4.6
Sweden	917	12,265	13,182	3.6	7.0	28	1.0	3.6
Austria	668	9,118	9,786	2.7	6.8	12	0.8	3.4
Others	2,308	70,711	73,019	19.8	3.2	?	14.3	1.4
(of which Australia)	(265)	(11,027)	(11,292)	(3.1)	(2.3)	(48)	(1.2)	(2.6)
Total	48,060	319,452	367,512	100	13	?	100	1

[1] Inclusive of those from socialist countries.
[2] Of the total amount of "international applications" filed in the country indicated.
[3] From Table 1.
[4] "Relative load" = data of Column 5 divided by those of Column 8.
[5] Estimated.

TABLE 9

COMPARISON BETWEEN THE UNITED STATES, THE EUROPEAN ECONOMIC COMMUNITY AND THE EUROPEAN ECONOMIC COMMUNITY, IF JOINED BY THE UNITED KINGDOM

	United States of America	European Economic Community	European Economic Community + United Kingdom
Indigenous international applications	19,844	13,535	18,014
Imported international applications	22,312	24,636	23,840
Total	42,156	38,171	41,854
Do. in % of world total[1]	14.5–17.2[2]	13.1	17.1
Indigenous share in % of country/area total	47	35.5	42
U.S.A. share in % of country/area total	47	29	30.5
Reverse position in %	23–34[2]		
Total exported applications	83,384–72,227[2]	63,010	74,732
Share of manufactured produce in %	44.7	21	29.7

[1] Calculated as 291,268 and 245,705 for the situation indicated in the second and third column respectively.

[2] First figure includes European Economic Community, second European Economic Community + United Kingdom, filings in the United States of America.

TABLE 10

COUNTRIES OF DESTINATION IN DECREASING SEQUENCE OF INCIDENCE OF PATENT IMPORTS FROM SOCIALIST COUNTRIES[1]

Countries of Origin								Countries of destination			
	USSR	East Germany	Czechoslo-vakia	Hungary	Poland	Roumania	Yugoslavia		Country of Destination	Aggregate Imports into that Country	% of Total
1	France	Germany	Germany	Germany	Germany	Germany	Germany	1	Germany	2,853	25
2	United Kingdom	*Czechoslo-vakia*	United Kingdom	Austria	United Kingdom	France	France	2	France	1,290	11
3	United States	France	France	United Kingdom	France	United Kingdom	Austria	3	United Kingdom	1,241	11
4	Germany	United Kingdom	Austria	France	*East Germany*	Japan	United Kingdom	4	Austria	716	6
5	Japan	Austria	United States	United States	*Czechoslo-vakia*	United Arab Republic	Switzer-land	5	Sweden	589	5
6	Canada	*Hungary*	Switzer-land	Sweden	Nether-lands	United States	*East Germany*	6	*Czechoslo-vakia*	525	4.5
7	Sweden	*Poland*	Sweden	Nether-lands	*Hungary*	Austria	United States	7	Switzer-land	510	4.5
8	India	Sweden	Japan	Japan	*Yugoslavia*	India	Belgium	8	United States	497	4
9	Switzerland land	Switzer-land	Belgium	Switzer-land	United States	Switzer-land	Nether-lands	9	Japan	410	3.5
10	United Arab Republic	*Yugoslavia*	Nether-lands	*Yugoslavia*	Japan	*Yugoslavia*	*Poland*		(India	358)	
11	Belgium	Nether-lands	*Yugoslavia*	India	Sweden	Nether-lands	Japan	10	(Nether-lands	351)	3
									(*Yugoslavia*	341)	

[1] Bulgaria omitted since figures too small to be significant.

[2] Position shared with the Netherlands.

Originating Countries are italicized.

Countries other than "originating" or "producing" countries of Table 7 underlined in broken lines.

TABLE 11

EXPORTED INVENTIONS BY ORIGIN*

Origin	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
United States	9,306	9,966	10,570	12,183	12,343	14,055	15,379	14,986	15,709	16,169	16,594	17,274	17,525	18,060
Germany	2,828	2,980	3,180	3,920	3,590	3,863	4,180	4,630	5,911	5,714	6,121	6,517	6,933	7,330
United Kingdom	2,740	2,610	2,730	2,990	3,030	3,050	3,280	3,380	3,620	3,725	3,739	3,755	3,871	4,239
France	1,175	1,150	1,362	1,453	1,635	1,694	1,968	1,978	2,205	2,298	2,404	2,450	2,565	2,868
Switzerland	1,533	1,526	1,897	1,857	1,915	1,703	1,815	1,951	2,112	2,069	2,174	2,247	2,139	2,334
Japan	90	120	175	170	240	330	420	425	685	874	1,082	1,281	1,943	2,147
Canada	910	960	990	1,010	1,100	1,090	1,070	1,160	1,210	1,327	1,646	1,641	1,574	1,595
Netherlands	722	850	894	1,033	1,046	971	910	1,033	1,101	1,154	1,212	1,226	1,194	1,346
Italy	375	403	639	674	645	734	731	765	998	857	1,010	969	1,023	1,005
Sweden	899	582	621	712	717	654	699	689	718	733	747	748	808	873
Austria	204	665	563	587	564	551	529	513	592	566	544	588	609	603
Belgium	365	415	402	373	365	356	356	379	402	454	470	496	569	505
Aggregate	21,147	22,227	24,023	26,962	27,190	29,051	31,337	31,891	35,263	35,940	37,743	39,192	40,753	42,905
Increment		1,080	1,796	2,939	228	1,861	2,286	554	3,372	677	1,803	1,449	1,561	2,152
Increment in %		5.1	8.1	12.2	0.8	6.8	7.9	1.8	10.6	1.9	5.0	3.8	4.0	5.3

* As measured by the number of filings into the preferred country of destination.

TABLE 12
Comparison 1954–1960 of International Inventions

Country	1954 International Inventions	1960–1954 Increment[1] %	1959–1953 Increment[1] Manufactured Product %	1954 Share of International Inventions	1960 "	1953 Share of Manufactured Product %	1954 I.I.Q.	1960 I.I.Q.	I.I.Q. Trend 1960–1954
United States of America	12,183	32.7	14	43.1	42.8	52.4	0.8	0.9	+
Germany	3,920	45.8	65	13.9	15.5	7.0	2.0	1.8	−
United Kingdom	2,990	24.6	21	10.6	9.8	10.3	1.0	1.0	0
Switzerland	1,857	11.4	—[2]	6.5	5.5	—[2]	—	—	?
France	1,453	45.5	63	5.3	6.2	4.1	1.3	1.24	+
Netherlands	1,033	11.7	40	3.65	3.05	1.1	3.3	2.8	−
Canada	1,010	31.3	19	3.65	3.5	3.4	1.07	1.16	+
Sweden	712	3.0	—[2]	2.5	1.9	—[2]	—	—	?
Italy	674	27.1	59	2.4	2.3	3.1	0.8	0.6	−
Austria	587	−3.6	58	2.1	1.5	0.7	3.0	1.9	−
Belgium	373	22.3	29	1.3	1.2	1.0	1.3	1.2	−
Japan	170	414	120	0.6	2.3	2.1	0.3	0.66	+
Other	1,353[3]								
Total	28,315	30		100	100	100	1	1	

[1] Basic year = 100.
[2] Not available.
[3] Estimated.

TABLE 13
COMPARISON 1960–1965 OF INTERNATIONAL INVENTIONS

Country	1960 International Inventions	1965–1960 Increment[1] %	1964–1959 Increment[1] Manufactured Product %	1960 Share of International Inventions	1965 "	1959 Share of Manufactured Product %	1960 I.I.Q.	1965 I.I.Q.	I.I.Q. Trend 1965–1960
United States of America	16,169	22.7	28	42.8	41.3	46.0	0.9	0.9	0
Germany	5,714	31.8	57.5	15.5	15.9	8.6	1.8	1.6	–
United Kingdom	3,725	20.2	32	9.8	9.5	9.7	1.0	1.1	–
France	2,298	28.5	48.5	6.2	6.5	5.0	1.24	1.3	+
Switzerland	2,069	15.4	—[2]	5.5	5.0	—[2]	—	5.5	?
Canada	1,327	27.7	24	3.5	3.5	3.0	1.16	1.2	+
Netherlands	1,154	20.5	37	3.05	2.9	1.1	2.8	2.6	–
Japan	874	159	291	2.3	4.8	3.5	0.66	0.8	+
Italy	857	20.5	74	2.3	2.2	3.8	0.6	0.6	0
Sweden	733	25.1	—[2]	1.9	1.9	—[2]	—	1.9	?
Austria	566	18.0	53.5	1.5	1.4	0.8	1.9	1.7	–
Belgium	454	29.0	47.5	1.2	1.1	1.0	1.2	1.1	–
Other	1,760[3]								
Total	37,700	27	35	100	100	100	1	1	

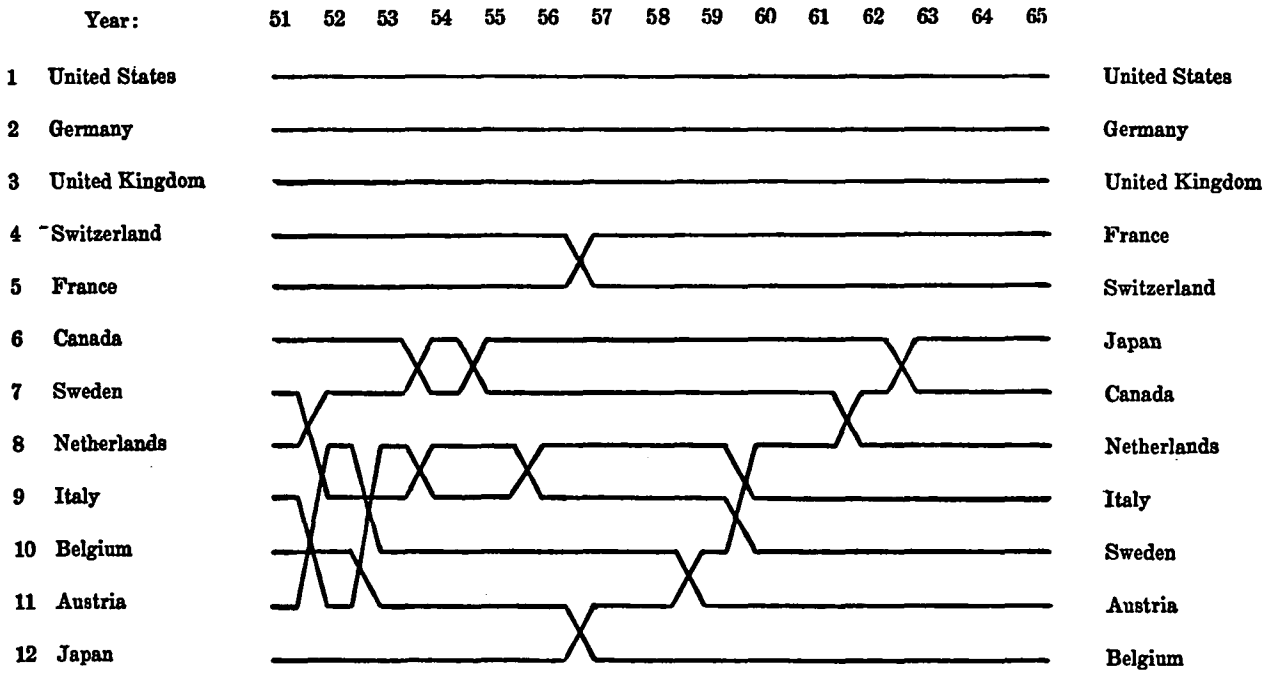
[1] Basic year = 100.
[2] Not available.
[3] Estimated.

TABLE 14

	Export Potential 1951–1966	Export to Japan 1951–1966	Export Potential 1965	Export to Japan as Part of Potential, 1965	Priority Keenness Factor 1951–1966
United States of America	100	100	100	0.53	69
Germany	35	40	38	0.45	100
United Kingdom	23	19	22.5	0.49	43
France	13.5	9	15	0.33	40
Switzerland	14	13	12	0.48	53
Canada	8.5	2	8.5	0.13	10
Netherlands	7	8.5	7	0.58	58
Italy	5.5	3.5	5	0.32	29
Sweden	5	4	4.5	0.40	40

CHART I

SEQUENCE OF MAIN EXPORTING COUNTRIES*



*The sequence indicates the relative annual positions of the countries as exporter of patent applications to the preferred country as indicated quantitatively in Table II.

CHART II

TRENDS IN I. I. Q.

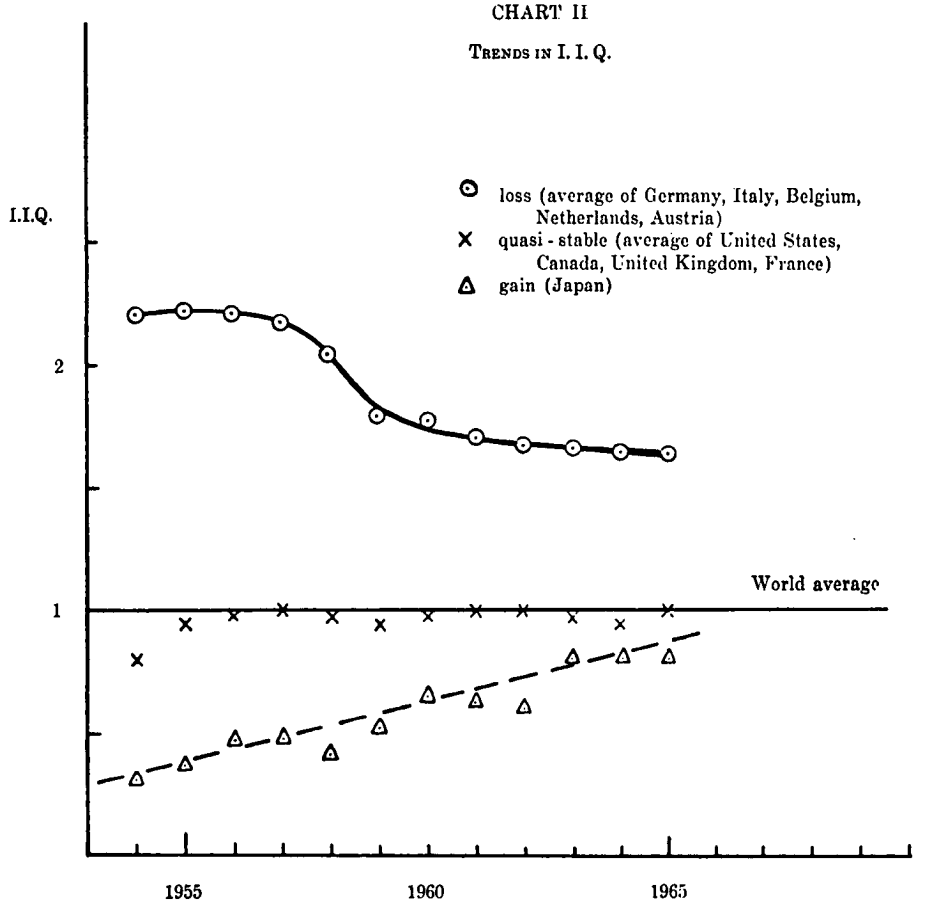
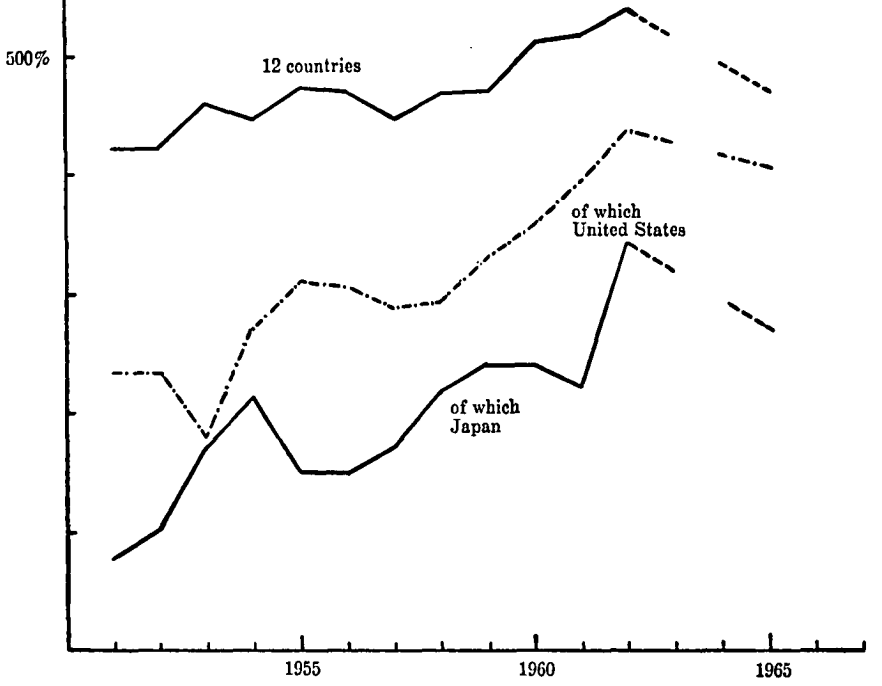


CHART III

ADDITIONAL COVERAGE OF EXPORTED INVENTIONS
(In countries other than the preferred country of destination)



"Downward trend" from 1963 onwards is due to the extrapolation used in French statistical data, and therefore not real.

CHART IV

RELATIVE ADDITIONAL GEOGRAPHICAL EXTENSION (BASIS: NETHERLANDS = 100)
First column: average period 1951 - 1962
Second column: year 1965

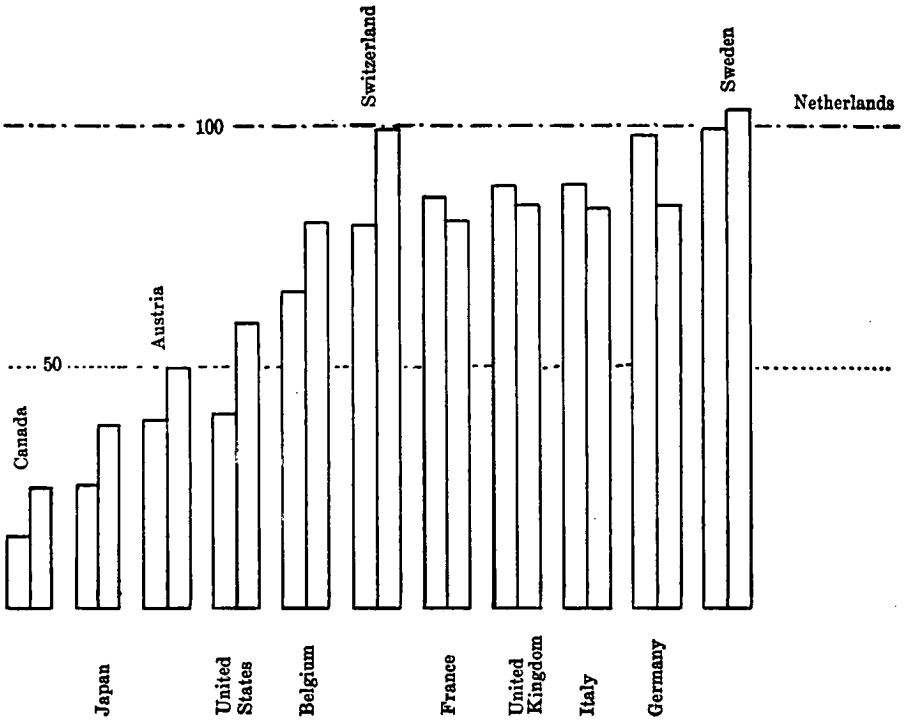


CHART V

PREFERENCE LISTS OF PATENT EXPORTS TO DESIGNATED AREAS

Designatory countries listed for each year from 1951–1965 according to decreasing incidence of filings from the originating countries indicated on the right-hand side of the graphs.

Legend

U.S.A.	US	Netherlands	N	Italy	I	Luxemburg	L
U.K.	UK	Norway	Nw	Japan	J	Mexico	M
France	F	Sweden	S	Canada	C	South Africa	SA
Finland	Fi	Switzerland	Sw	Austria	Au	India	In
Germany	G	Denmark	Dm	Australia	Aia	New Zealand	NZ

X (in list Japan) Portugal (Perhaps due to printing error)

Chart Va

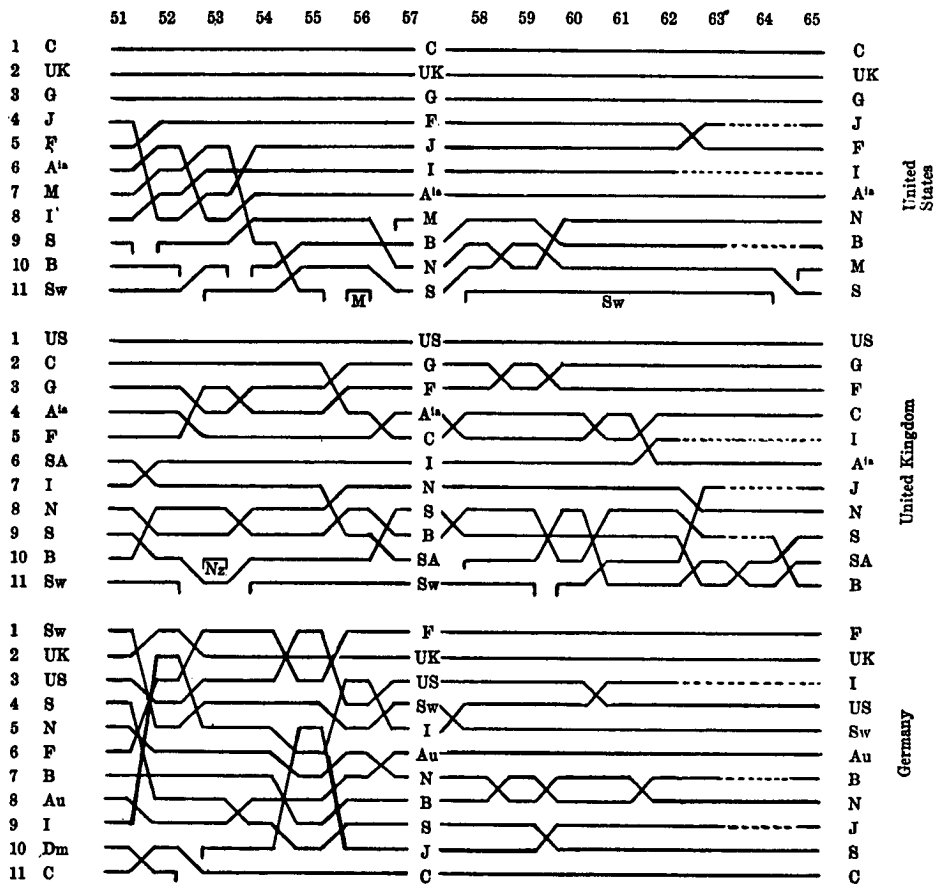


Chart Vb

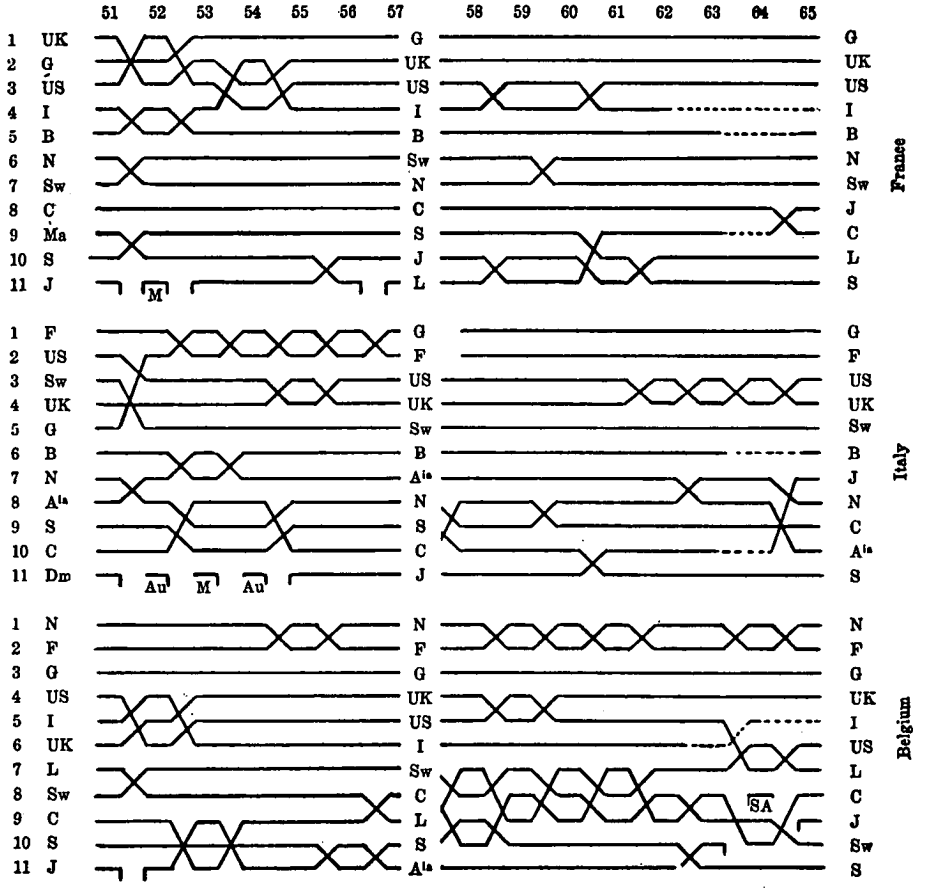
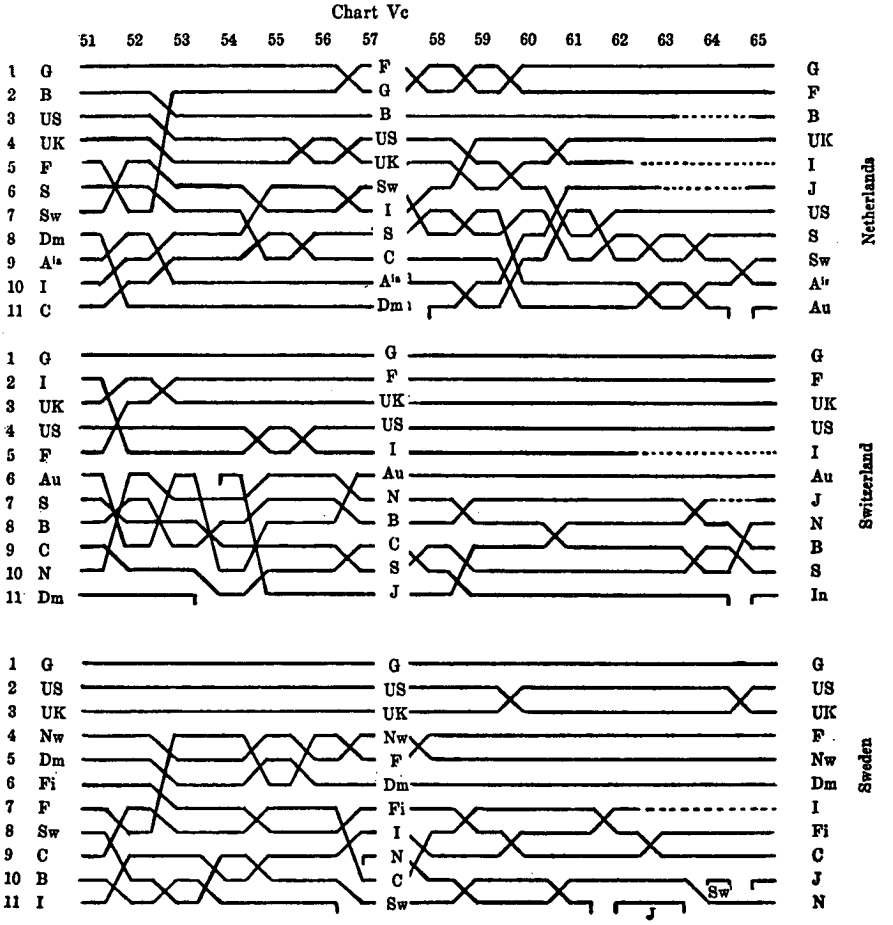
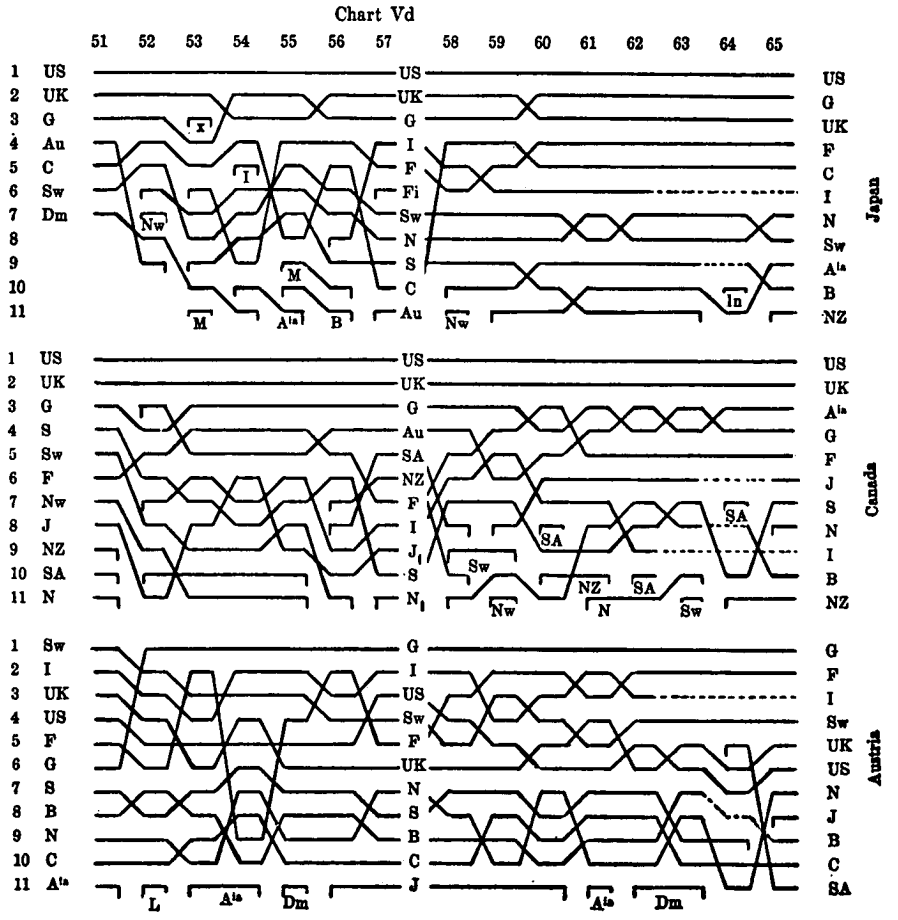

51 52 53 54 55 56 57 58 59 60 61 62 63 64 65
1 UK G G
2 G UK UK
3 US US US
4 I I I
5 B B B
6 N Sw N
7 Sw N Sw
8 C C J
9 Ma S C
10 S J L
11 J L S
M
France
1 F G G
2 US F F
3 Sw US US
4 UK UK UK
5 G Sw Sw
6 B B B
7 N Ala J
8 Ala N N
9 S S C
10 C C Ala
11 Dm J S
Au M Au
Italy
1 N N N
2 F F F
3 G G G
4 US UK UK
5 I US I
6 UK I US
7 L Sw L
8 Sw C C
9 C L J
10 S S Sw
11 J Ala S
SA
Belgium

Chart Vc


51 52 53 54 55 56 57 58 59 60 61 62 63 64 65
1 G F G
2 B G F
3 US B B
4 UK US UK
5 F UK I
6 S Sw J
7 Sw I US
8 Dm S S
9 Aus C Sw
10 I Aus Au
11 C Dm
Netherlands
1 G G G
2 I F F
3 UK UK UK
4 US US US
5 F I I
6 Au Au Au
7 S N J
8 B B N
9 C C B
10 N S S
11 Dm J In
Switzerland
1 G G G
2 US US US
3 UK UK UK
4 Nw Nw F
5 Dm F Nw
6 Fi Dm Dm
7 F Fi I
8 Sw I Fi
9 C N C
10 B C J
11 I Sw N
Sweden


Chart Vd
51 52 53 54 55 56 57 58 59 60 61 62 63 64 65
1 US
2 UK
3 G
4 Au
5 C
6 Sw
7 Dm
8
9
10
11
US UK G I F Fi Sw N S C Au
US UK G F C I N Sw Ala B NZ
Japan
US UK G Au SA NZ F I J S N
US UK Ala G F J S N I B NZ
Canada
G I US Sw F UK N S B C J
G F I Sw UK US N J B C SA
Austria

FORUM

Although the primary purpose of *IDEA* is to communicate the research work of the Institute, it also serves as an educational vehicle for the exchange of informed opinion. The positions taken by the authors of papers and notes in this section are not necessarily those of the Institute. It is hoped that the material published in this section will stimulate researchers to undertake further study of the issues.

The Patent Cooperation Treaty—The 1968 BIRPI Draft Compared With a Simple New Alternative Proposal

LEONARD J. ROBBINS*

IN A SPEECH† delivered before the Twelfth Annual Public Conference of The Patent, Trademark and Copyright Research Institute of The George Washington University, on June 21, 1968, Commissioner of Patents, Edward J. Brenner defined the purposes of the proposed Patent Cooperation Treaty (PCT) as follows:

> . . . to enable applicants to *defer* the substantial expenditures involved in multiple translation, prosecution and other aspects of foreign filing practice until they have had an opportunity to evaluate the inventions in the light of the best possible prior art and with a clearer view of their commercial value in international markets. An equally important second objective is the reduction of the burdening overload on patent offices which is largely caused by the multiple repetition of searches and examinations of pluralities of applications on the same invention filed in several countries.

It would be entirely safe to say that there is general agreement everywhere with these broad objectives.

* The author is a senior partner in the firm of Langner, Parry, Card and Langner of New York, and specializes in foreign industrial property matters. The present article is related to his previous article "Patents and U.S. Foreign Policy," in *IDEA*, Vol. 11, No. 4 (Winter 1967-1968), p. 521.

† Commissioner Brenner's speech will appear in full in *IDEA*, Vol. 12 Conference Number (1968).

The criticisms that have been raised in the United States and abroad to the original form of PCT-BIRPI Document PCT/I/4 dated May 31, 1967, and known as the 1967 BIRPI Draft—have been directed to its complexity and to the probable undesirable results that would ensue. In particular, the intervention of national and international officials in filing procedures would impair the traditional freedom of choice and action of patent applicants, and a new and costly international bureaucracy would be established presumably with its aspirations directed towards the dubious and impractical goal of the "universal" patent.

The second draft of PCT-BIRPI Document PCT/III/5 dated July 15, 1968, and known as the 1968 BIRPI Draft—has now been published. It seems clear that the BIRPI officials, and other national officials associated with them in the drafting of the latest plan, have paid no real attention to the basic and substantive objections that were raised but have only made relatively minor and inconsequential procedural changes.

According to the 1968 BIRPI Draft, the following sequence of steps would be required to obtain national patents in designated countries covering the same invention:—

> 1) The applicant would prepare an international application either *ab initio* or based on an earlier national application, and file it in his national patent office (the receiving office), designating the countries in which he might wish to proceed later with national applications having the benefit of the priority date.
>
> 2) The receiving office would examine the international application for certain formalities and then directly dispatch copies to the International Bureau in Geneva (i.e. BIRPI or its WIPO successor) and to a Search Authority (which could be the same or a different examining national patent office or IIB in the Hague).
>
> 3) The Search Authority would make an international search of the prior art on the basis of the claims of the International application and dispatch copies of its international search report directly to the International Bureau and to the applicant (not to the receiving office that initiated the search). The international search report would be available within "a prescribed time" to be defined in Rules not yet published: however presumably this will be less than 20 months from the priority date which is the minimum term before national examination can begin.
>
> 4) The applicant could then amend the international application by direct correspondence with the International Bureau.
>
> 5) The International Bureau would then send copies of the international application, including any amendments, directly to the national patent offices of the designated countries. Nothing is clearly specified as regards payments of filing fees, preparation of translations when required, or the handling of prosecution according to national procedures: presumably the applicant in some way gets his

property back into his own hands from the International Bureau at this stage.

6) The International Bureau will publish his international application on or after the time fixed by law in any designated country but not earlier than 18 months from the priority date.

7) The applicant could then, if he so desired, demand from the International Bureau an international preliminary examination by a Preliminary Examining Authority (i.e. an examining national patent office, the same as or different from the one that made the international search, or IIB) to furnish a non-binding advisory report on novelty, inventive height and industrial applicability, for use in "elected States." The International Bureau would instruct an appropriate Authority and the applicant could then directly prosecute his application before this Authority. The resulting preliminary search report would be sent to the applicant and the International Bureau and the latter would forward it to the national patent offices in the elected States, who would be free to make what use of it they wished. Any further procedure in the national offices would be directly with the applicant.

There has been a rising tide of discontent in Europe with the bureaucratic complexities of the 1967 BIRPI Draft. This has culminated, just a few weeks before the 1968 BIRPI Draft was available, in the publication of an alternative plan to achieve the same basic objectives, known as the FICPI-II Plan.

This new European proposal is sponsored by the Fédération Internationale des Ingénieurs-Conseils en Propriété Industrielle—that is, the International Federation of Patent Attorneys, generally known by its French initials FICPI. This old established organization, which has been in existence for over 50 years, has individual members from countries throughout the world, but in essence comprises a group of patent associations of most of the European nations. Many leading members of the European profession belong to its efficient Executive Committee.

The Federation has actually officially presented two plans as alternatives to the BIRPI Plan. The first, identified as FICPI-I, is dated February 22, 1968; it was hurriedly prepared, and has been withdrawn, so that its provisions will not be discussed here. Its main interest is that it proved reasonable alternatives were possible and that the BIRPI proposals, supported so vigorously by U.S. and European officials, were not by any means sacrosanct. It has now been replaced by the second plan, FICPI-II, dated June 20, 1968.[1]

The full text of the FICPI-II Plan, together with extracts from an

[1] Following a meeting of the FICPI Executive Committee at Sandefjord, Norway on June 8, 1968, and based on recommendations of various delegates, particularly the Danish delegate, the FICPI-II Plan was prepared by a special sub-committee comprising P. O. Langballe (Denmark), C. M. R. Davidson (Netherlands), K. Høst-Madsen (Denmark) and J. Corre (France).

explanatory memorandum by the FICPI Executive Committee, are given in the Annex to the present article.

Attention is also directed to the article immediately following, entitled "International Novelty Search Based on Claims or Search Definitions?" by P. O. Langballe. This recommends the adoption of a new uniform type of abstract of the invention, separate and distinct from the patent application itself, to be used as the basis for the international search. The format would be the same whatever the country of origin.

According to the FICPI-II Plan, the following sequence of steps would be involved, as compared with those required by the 1968 BIRPI Draft:—

> 1) The applicant would start with a regular national application (normally in his domestic patent office). If he wished to follow the international treaty route, he would advise the national office and then, within the Convention year, directly request an Authorized Search Organization for a search report, preferably on the basis of a Search Definition (see above).
> 2) On receipt of the Search report he could prepare an appropriately amended application for filing in other foreign countries up to 18 months from the priority date—i.e. the filing date of the original national application. (This period of 18 months is of course arbitrary and might be made longer.) These foreign applications would be treated as regular national applications having convention priority. Even if the search report was not available he could still file within the 18 months period, provided the search has been initiated. The Search report would also be filed to assist the foreign office.
> 3) In examining patent offices, the regular examination for patentability would proceed, normally without need for further search. In non-examining patent offices, the patent would be issued with the Search report of record.
> 4) BIRPI (or its successor bureau) would be used to coordinate and publish all relevant information on the multiple filings after 24 months from the priority date.

The procedure according to the FICPI-II Plan therefore fully accomplishes the basic objectives as regard applicants and patent offices enunciated by Commissioner Brenner and set out at the beginning of this article.

The procedure according to the 1968 BIRPI Draft might indeed also do the same, but the contrast between the simple FICPI procedure and the complexities of the BIRPI procedure are dramatic and overwhelming.

Some major practical objections to the BIRPI scheme are as follows:—

First. The separate "international application" is merely an awkward and unnecessary procedural device for extending and main-

taining priority rights for some period less than 20 months, instead of the 12 months provided by the International Convention. The identical result would be obtained by a primary national application under the FICPI-II Plan without the multiplication of copies, record-keeping and transmission of documents under the 1968 BIRPI Draft.

It should be noted also that many small non-examining national patent offices have no staff competent to examine "international applications" for correct form. If the Search Definition concept is incorporated in the FICPI-II Plan, an ideal international cooperation is achieved, and the onus would lie on the applicant, where it properly belongs, to prepare a Search Definition clearly explaining a single invention.

Second. The traditional intimate attorney-client relationship in this field would be drastically distorted, under the 1968 BIRPI Draft. National patent office officials would communicate directly with other national officials or with the international officials of IIB to initiate the international search. International officials of the International Bureau (or BIRPI) would transmit documents to other officials and to the applicant and would directly initiate filing in the patent offices of the designated countries. Who would be responsible for errors of commission or omission? At such early stages in the development of an invention, new ideas constantly arise and many decisions may be changed overnight: the still inchoate rights of the applicant often depend on prompt direct communication between his patent attorneys and national patent office officials. On the basis of past and present experience, speedy action would be impossible through bureaucratic channels.

Such activities, even though restricted to the procedural level, will clearly require the employment of numerous officials by the International Bureau (or BIRPI), more officials by IIB, and probably more officials by national patent offices. Their salaries, whatever the route, come from public funds. The costs are intended to be covered, or partly covered, by as yet unannounced fees for the various steps payable by the applicant. Therefore the net effect would be to eliminate patent attorneys and substitute national and international officials, in all the countries involved, at a critical period of an international filing program. It would appear that BIRPI should submit hard evidence that this would actually be desirable and economical!

Third. The optional international preliminary examination, if

used, would be a complicating, unnecessary and expensive step. It seems highly unlikely that preliminary examination reports from such diverse jurisdictions as IIB and the United States, German, Russian, and Japanese patent offices would be mutually acceptable *per se* without further national examination. In the non-examining countries, such preliminary examination reports would add little of value to the international search report for record purposes.

Under the FICPI-II Plan the applicant would have the opportunity to prepare revised foreign applications in full conformity with the substantive and procedural requirements in each designated foreign patent office after full consideration of the prior art, thus easing the patent office burden.

Fourth. The publication procedure contemplated in the 1968 BIRPI Draft is so variable that the date of publication would depend on what countries the applicant had chosen to file in. Furthermore, to handle the reproduction and storage of several hundred thousand applications, on any basis, would involve very large costs.

In contrast, the FICPI-II Plan would merely use BIRPI as a convenient base to disseminate information on multiple filings, so that an enquirer would know when to look for corresponding national patents. This would only involve minimum printing expenses.

The officials who have prepared the 1968 BIRPI Draft are the same as those who would supervise the operation of PCT in BIRPI or its successor bureau. In preparing the script, they have given themselves a prominent part. This may be human nature, but in view of the vital importance of smoothly functioning patent systems in national and international commerce, it is questionable whether the views of academic officials, however high minded and industrious, should prevail without challenge.

If BIRPI will not listen to legitimate criticism of the basic propositions incorporated in the 1968 BIRPI Draft, then it appears to be the responsibility of the patent profession in all countries to persuade industry leaders and legislators that a choice of paths is now available and that the one being urged with such determination may not be advantageous for any of the parties involved.

The one point of contact or parallelism between the 1968 BIRPI Draft and the FICPI-II Plan is the "decentralized-centralized" searching concept, whereby the search function would be confined to four

major patent offices and IIB. This is merely a convenient but unsatisfactory compromise, based on present conditions, since the searching of the same invention, in offices with such different traditions, is never likely to lead to identical results. The underlying need is for a single computerized search center,[2] requiring very large expenditures and international cooperation of a new type. Until this is achieved, the simplest possible solution to existing problems should be adopted, such as the FICPI-II Plan. Only after a single search center has been conclusively proved to be practical and the necessary organization has been established, would it be advisable to consider steps towards real harmonization and a more elaborate and intimate type of cooperation in this very eclectic field.

ANNEX

The full text of the FICPI-II Plan, dated June 20, 1968, is given below, followed by extracts from an explanatory memorandum by the FICPI Executive Committee.

FICPI-II Plan

Preamble:

The contracting countries, being animated by a desire to facilitate the filing of patent applications and the grant of patents on the same invention in several countries, hereby conclude the present Special Arrangement, pursuant to the provisions of Article 15 of the Convention of the Union of Paris for the Protection of International Property, as last revised at Lisbon on October 31, 1958 (hereinafter referred to as the International Convention).

Article 1

The following definitions shall apply to the provisions of this Special Arrangement:

a) *The Primary Application*: The First Application as defined in Article 4 of the International Convention for grant of protection of an invention by patent or inventor's certificate.

b) *The Primary Country*: The contracting country in which the primary application is filed.

c) *The Priority Date*: The date of filing the primary application.

d) *Secondary Application*: A provisional application, comprising the documents specified in the Regulations, and filed in any contracting country other than the primary country within a period of 18 months after the priority date.

e) *Secondary Country*: Any contracting country in which a secondary application is filed.

f) *Regular National Application*: An application filed in any of the contracting countries and complying with the rules of domestic law.

g) *National Office:* The competent administration authorized to

[2] *IDEA*, Vol. 11, No. 4 (Winter 1967-1968), pp. 530-532.

grant protection for invention under domestic law.

h) *Primary Office:* The national office of the primary country.

i) *Secondary Office:* The national office of any secondary country.

j) *Examining Country*: Any contracting country whose domestic law provides for examination for novelty and patentability by its national office.

k) *Declaration of Particulars*: A declaration in prescribed form as specified in the Regulations and comprising all relevant particulars pertaining to the primary application, all secondary applications and the complete search report.

Article 2

Subject to the provisions of this Special Arrangement the contracting countries undertake:

1) to establish a common Authorized Search Organization (Article 3);
2) to establish a common Publication Organization (Article 8);
3) to adopt a common application procedure (Article 4).

Article 3

The common Authorized Search Organization shall comprise:

1) the International Institute of Patents (IIB) of the Hague;
2) such national offices of examining countries as may be designated from time to time in the Regulations.

Article 4

The common application procedure shall comprise the following rules:

Each contracting country undertakes to acknowledge the filing of a secondary application as a sufficient requirement for obtaining a right of priority as provided for in Article 4 of the International Convention, provided that

1) the secondary application is filed within 18 months from the priority date;
2) the secondary application is accompanied by either
   a) an international search report issued by the Authorized Search Organization, or
   b) a declaration signed by the applicant and certifying that, within a period of 12 months from the priority date, the applicant has filed a request for a novelty search report with the Authorized Search Authority, and that applicant undertakes to submit a copy of this report within X days from the receipt thereof.

Article 5

An applicant wishing to benefit from the facilities of this Special Arrangement for filing applications for protection of the same invention in a selected number of countries shall proceed as follows:

1) the applicant shall file a primary application in one of the contracting countries;
2) within 12 months from the priority date the applicant shall file a request for an international search report with the Authorized Search Organization. Such request shall be accompanied by
   a) a prescribed search fee,
   b) a Search Document, as specified in the Regulations (Claims

or Search Definition);

3) within 18 months from the priority date the applicant shall file a secondary application in each of the selected secondary countries accompanied by the documents prescribed in Article 4 (2).

Article 6

Each contracting country may provide that within a prescribed period after the filing of the international search report, the applicant shall be required to convert the secondary application into a regular national application.

When converting a secondary application into a regular national application the applicant may include any revisions that would be compatible with the provisions of the International Convention.

Article 7

1) Any contracting country may provide that a secondary application and all accompanying documents shall be laid open to public inspection at the end of a period prescribed by domestic law.
2) Any contracting country may further provide that, if the subject matter of a secondary application is found to conflict with that of an unpublished pending regular national or of a secondary application, both having a later effective date than the first mentioned secondary application, then the applicant may be required to convert the said first mentioned secondary application into a regular national application without delay, and to prosecute such converted application, whether or not the international search report prescribed in Article 4 is then available.
3) Any contracting country may also provide that its national office may acknowledge the patentability of the subject matter defined in an application filed under the provisions of this Special Arrangement, provided that the patentability of the same subject matter, defined in an application filed in one or more countries as designated in the Regulations, has been acknowledged by the national office of said other country or countries.

Article 8

1) The common Publication Organization shall be the BIRPI.
2) Within 26 months from the priority date or as soon as possible thereafter the BIRPI shall publish a Declaration of Particulars as specified in Article 9.

Article 9

1) Within 24 months from the priority date the applicant shall file a Declaration of Particulars with the BIRPI.
2) The Declaration of Particulars shall include all relevant particulars, as prescribed in the Regulations, for identifying:
   a) the primary application;
   b) all secondary applications;
   c) the complete search report.

Article 10

The applicant may at any time withdraw without prejudice any application filed under the provisions of this Special Arrangement.

Article 11

No provision under this Special Arrangement shall have any compulsory effect on the prosecution of regular national applications under domestic law.

Article 12

1) Failure by the applicant to comply with the provisions of Articles 4 and 5 shall have the effect that all secondary applications shall be treated as abandoned.

2) Failure by the applicant to comply with the requirements of Article 6 and Article 7 (2) shall have the effects prescribed by domestic law.

In a memorandum explaining the FICPI-II Plan, the Executive Committee of FICPI included the following comments:

Filing of Request for International Search before 12 Months

This provision is laid down in Article 5 (2). We have considered that the term for this request should coincide with the priority year so as to conform with the equivalent provision of PCT, it being understood, however, that it should be preferable both for the applicant and for the authorities (Search Organization and National Offices) to file this request as soon as possible after the priority date, and we believe that in practice this will normally be the case. If so, this procedure would tend to reduce the backlog of the Search Organization and of the National Offices. As regards the Search Document, (Art. 5 (2b)), we continue to believe that what is now referred to as a Search Definition would provide a better basis for the international search than the claims of an international application. However, we propose to postpone discussion on this particular though rather important matter so as not to complicate or elaborate the present Memorandum, and we have therefore left this point open in FICPI-II.

It is estimated that the requirement for an international search report will be less prejudicial than an "international application" to the later drafting of national applications in accordance with the varying practices of the various countries. Moreover, the necessity of laying down rules for the formulation of international patent applications will be avoided. In any case, it would be difficult to establish such rules, and even if international agreement could be obtained in regard to what, on the face of it, would appear to be clear and unambiguous rules, international applications purporting to conform with such rules would invariably be influenced by the traditional drafting of applications prevailing in the country of origin. Thus, if an international application prepared according to the European standards were filed in the Anglo-Saxon countries, and more particularly in the U.S.A. and Canada, such an application would be inadequate under the practice of these countries. On the other hand, an international application, prepared according to the U.S.A. standard might involve considerable complications when filed in the European countries.

Extension of Priority Period for Filing Secondary Applications to 18 Months

This provision (Art. 4) is also, at least in principle, in conformity with the PCT (as revised). When considered in conjunction with Art. 5(2 and 3), it will appear that this provision—unlike the provisions of PCT, which require the applicant to draft the international application without knowledge of the novelty search report—will enable the applicant to obtain and study the novelty search report before deciding if, to what extent, and in which form he should file secondary applications. This will obviously be a great advantage to the applicant. It will also be an advantage to the national offices. In fact, although the FICPI-II like PCT aims at facilitating international filing, it would clearly be undesirable to encourage the applicants to overcrowd the national offices with applications which must later be abandoned for lack of novelty or commercial interest. The provisions of Articles 4 and 5 will tend to remove or at least to reduce this drawback.

It might be stipulated that in his request applicant should name the countries in which he intends later to file secondary applications. However, it seems preferable to avoid such a stipulation, which might tempt applicants to preselect many more countries than they really want, and from mere inertia or stubbornness to keep their applications pending in these countries long enough to disturb the national industries and the local patent offices (particularly in the small countries). The temptation would be particularly great in the case of private inventors and small industries, who might be inclined to bite off too much and hang on until all hope was lost. In fact, the PCT Plan in its present form might revive the ancient dream of getting-rich-quick through "world patents" for mere "bright ideas" thereby tending to make the PCT Plan an instrument of gambling rather than an instrument of rational industrial progress.

FICPI is therefore of the opinion that instead of giving the applicant two opportunities of selection—a first selection in rosy circumstances, and a second selection, at which he might feel more or less prejudiced by his first selection (people always being reluctant to waive claims once they have staked them out)—it would be preferable that there should be one selection only, and this should be at the time when the applicant knows the result of the international novelty search, which, according to the time table of the PCT Plan, would be within 6 months from the date of filing the request.

Conclusions

We believe that there are two main obstacles to an efficient international patent cooperation as envisaged in PCT:

1. The question relating to Working Languages,
2. The risk of complications resulting from any tendency towards increased international bureaucracy,

and that any proposal for promoting international cooperation should face these obstacles and tend to remove them.

The FICPI-II takes care of both of them:-

There will be no need for any specific working language, except that a request filed with a certain international search organization would, of course, have to be written in a language mastered by that

particular search organization. The national patent offices would be free to prescribe the filing of translations of all search documents, just the same as with priority documents today.

The fundamental principle of leaving the initiative with the applicants instead of overloading a centralized institution with a lot of administrative work will tend to counteract any tendency towards increased bureaucracy. Thus, all steps to complete filing in selected countries and to obtain an international novelty search would be taken by the applicants themselves or their agents.

Finally, in FICPI-II, just as in PCT, it is emphasized that on the national level, domestic law shall prevail (Article 11). Thus, it would be up to the national patent offices to decide whether to check if the eventual national application has a proper basis in the primary application and the search report. This would on principle not differ from the question of checking priority claims under the present day system. Very few patent offices check priority claims today, and no serious problems seem to arise from that fact. Finally, it is the applicant's own responsibility whether his claim to priority is well founded or not. If a national patent office would want to check whether an eventual national application is properly based on the search documents, they could, if they find that not to be the case, direct the applicant to have a new international search performed.

International Novelty Search Based on Claims or Search Definitions?

P. O. LANGBALLE*

INTRODUCTION

PRACTICALLY ALL PEOPLE IN THE PATENT WORLD agree that an international novelty search of patent applications is the first prerequisite for an international patent cooperation tending to facilitate and rationalize the operation of the patent system.

Such cooperation among the national administrations (patent offices) is, in fact, overdue, and while opinions differ as to the most expedient ways and means for achieving this object, nobody will deny that it is an absolute and urgent necessity to establish an international novelty search. The reasons are well-known and need not be restated or elaborated here.

The initiative taken by the United International Bureaux for the Protection of Intellectual Property (BIRPI) to prepare and elaborate the basic proposals and documents for an international Patent Cooperation Treaty (PCT) and to convene meetings of experts for discussing these proposals therefore deserves the appreciation and admiration of everyone concerned, notwithstanding the fact that many of them

* The author is a patent attorney and senior partner of the firm of Hofman-Bang & Boutard, Copenhagen, and is also President of the Working Commission and an Honorary President of the International Federation of Patent Agents (FICPI).

and particularly the members of the International Federation of Patent Agents (FICPI) believe that other and more adequate solutions may be found than those at present advocated by BIRPI.

However this may be—and I trust that such alternative proposals will be discussed on their own merits in due course—the discussion of the PCT in Geneva in March 1968 has revealed that even among the professed adherents to general principles of the PCT as defined in the working papers, opinions differ as to the mechanics of the proposed international search and more particularly as regards the fundamental question: *On what basis should the international novelty search be based?*

While the majority of the participants in the discussion seemed to agree that the international novelty search should be based on the *claims* of an International Application, others were of the opinion that a brief extract of the Specifications comprising a concentrated definition of the essential features of the invention would be preferable. Such extracts were referred to as "Search Abstracts," "Summaries," or "Abridgements." However, for the purpose of the following analysis, I prefer to use the term "Search Definition," it being understood that the documents to be used as a basis for the search should in fact comprise a definition of the essential features of the invention.

It is my firm belief—based on experience from several discussions—that the full meaning and precise implications of the Search Definition are not fully appreciated by those who advocate that the international search should be based on the claims.

The present paper, therefore, purports:

(a) to explain—generally and by way of specific examples—precisely what the term Search Definition means;

(b) to demonstrate the advantages—as compared with claims—of the Search Definition as a basis for an international novelty search.

However, before dealing with the Search Definition and answering the two questions: What does it mean? and What are the advantages?—I shall first of all deal with

The Claims

Everybody knows, of course, what a claim is (and this is probably the reason why many people would prefer to rely on claims rather than anything else as a basis for the search). The verb "to claim" means "to demand as a right" and in patent language it means more specifically to "demand as a monopoly." The noun "a claim" obviously

means that which is claimed, i.e. "the thing which is demanded as a monopoly." It follows that in patent language a claim is essentially a *legal* concept. It is true, of course, that the object of the claim, the thing for which a monopoly is claimed, must be an invention, since the monopoly (the patent) can only be granted for an invention, and it may, therefore, be argued that the claim must somehow amount to some kind of a definition of the invention. Well, it must be admitted that this is, at least theoretically, a logical and sound argument. But it does not necessarily follow—as the following examples will show—that the particular kind of definition or explanation of the invention which is given in the claim is a good working basis for an international search. There are two reasons for this:

As already stated, the claim is preeminently a *legal* concept. In all national legislations—and the PCT and all alternative proposals rightly assume that national legislation shall prevail for the ultimate grant of the patents—the claims shall define the scope of protection. With this primary object in mind the applicant will always endeavour to define his scope of protection as broadly—and consequently as indefinitely—as possible, using such more or less vague and indefinite terms at "means for this" and "means for that." The actual structures, elements or devices, their combinations and functions which characterize the invention as defined in the claims will seldom be understood without reference to drawings, examples, and a detailed description thereof. Consequently, the Examiner, or rather the Searcher, in most cases will have to study such more precise explanations of structures, combinations and functions, before he knows precisely what to look for, and where he may find it.

It would seem that, in previous discussions of this matter, it has sometimes been overlooked that there is no such thing as an internationally accepted standard of claim drafting. While it is true that in all countries a claim shall define the scope of protection, it is equally true that the manner in which this is done varies considerably from one country to another.

It will hardly be necessary to elaborate on these differences as regards standards of claim drafting: In the USA, the largest industrial country of the world, where the greatest number of patents are granted, the majority of claims are worded as an enumeration of elements and structural features, the combination of which defines the scope of protection. In such claims there is no distinction between prior art and the novel features according to the invention. Without commenting on the merit of this type of claims, based on a long tradition and a firmly established philosophy of patent law, it will

hardly be denied that such claims are definitely not suitable as a working basis for an international novelty search. In fact, I am told—and it appears to me to be an obvious and indispensable expedient—that before proceeding to the novelty search, the U.S. Examiner will invariably have to prepare his own sort of "abstract" derived from a more or less cursory reading of the specification and study of the drawings. In other words, he does precisely that which, according to the present proposal, should be done by the applicant when requesting the novelty search.

Now, take Germany, the largest European patent country. Here the claims do, in fact, comprise an introductory clause or preamble summarizing the relevant features of prior art, and a characterizing clause defining the essential features of the invention. Admittedly, in some cases this type of claims could be used as a working basis for the search. But even here, the claims are often so concentrated and use such broad and vague terms as "Mittel," "Organe," et cetera that a clear understanding of the essence of the invention cannot be obtained without reference to specific embodiments explained in the specification and illustrated in the drawings. German-style claims with various, more or less significant, modifications are used in many other countries including the Netherlands, Switzerland and the Nordic countries. Finally, there are the British, Russian and Japanese claims which differ to some extent from each other and from the USA and German types.

Now, with this multiplicity of types of claims, each based on national traditions and philosophy, would it be practically, psychologically or politically possible for all the countries participating in the international cooperation to agree on one standard type of claims to be used as the working basis for the international search? I think not. Yet, without such universal agreement, it seems fairly obvious that the international novelty search system could not work.

And this leads me on to what I firmly believe to be the only really practicable and politically possible working basis for the international novelty search:

The Search Definition

First of all, it must be emphasized that, basically, this is not a new concept. In fact, abstracts comprising a condensed definition of an invention are being used every day all over the world. Fundamentally, a Search Definition is communication of an invention from one expert

to another, a communication in concentrated form and plain language explaining the invention or a concrete embodiment thereof, usually with reference to a drawing, chemical or mathematical formulae or similar symbols.

However, while the abstracts required by certain patent offices as an appendix to the application (and also the abstracts published in certain periodicals) are normally of a general informative character designed to give the reader a quick orientation rather than a complete understanding of the invention, the Search Definition must be carefully prepared with a special view to its applicability as a working basis for the international novelty search.

For this reason, it will be necessary to adopt a special and internationally acceptable form for the Search Definition. It must be drafted as a standardized communication from the applicant to the Searcher, comprising the necessary and sufficient information to enable the Searcher to proceed immediately with the search without having to read several pages of more or less relevant description of details. This information should not be confined to a definition of the structural features of the invention as normally summarized in the claims, but the Search Definition should comprise precisely that information which is required to tell the Searcher what to look for, and where he may find it.

No doubt, much time is wasted in novelty searching in the national patent offices by analyzing details of elaborate descriptions and drawings before a clear understanding of the relevant features of the invention can be reached. This, incidentally, may be one, if not the decisive, reason for the inefficiency and the consequent backlog in many examining patent offices.

Now, the Search Definition, if properly drafted according to prescribed rules, should alleviate the Searcher of this burden and thus contribute to a smoother and more efficient function of the patent system.

What the Searcher will need in order to do his work as efficiently as possible is a brief and precise statement of the following facts:

(1) The art to which the invention relates. If necessary, this may include a reference to the relevant class in the international classification.

(2) A brief summary of the relevant features of prior art, preferably including reference to some prior patent specifications or other literature, wherein these features are more fully explained.

(3) The object of the invention, i.e. the advantages or improvements aimed at.

(4) The novel features according to the invention.

The definition of the novel features given in item (4) will normally comprise sub-items which substantially correspond to the characterizing clause of German-style claims and sub-claims. However, since the Search Definition is drafted *exclusively* for the purpose of *novelty search* and—unlike the claims—is concerned neither with assessment of patentability nor with the scope of protection, these features may be defined much more precisely and with more direct reference to the drawings than it would generally be possible to do in normal claim drafting.

The following examples of Search Definitions will, I believe, clearly demonstrate the advantages of this particular form of abstracts instead of claims as a working basis for the international novelty search.

These advantages may be summarized as follows:

(1) Each country would continue to use its own standards for claim drafting, the claims being reserved for "home consumption" (national examination) only.

(2) There will be no need for an International Application comprising an internationally accepted type of claims, and consequently there will be no need for amendment, formal corrections and correspondence in regard to such claims. In fact, the Search Definition will be the only document required for the international search, and since it has no bearing whatsoever on assessment of patentability or scope of protection—which are left entirely to the national authorities—it should be generally acceptable as a practical working instrument for the international novelty search.

(3) The Search Definition is a *brief* document. Normally it would comprise only one to three pages and a few sheets of drawings. Consequently, translation costs could be reduced to a minimum, and there will be no need for a generally accepted working language to be used by all the countries concerned.

(4) It will serve to facilitate and expedite the search, thereby increasing the efficiency of the international search authority.

In my previous discussions with competent experts, two main objections have been raised in regard to the proposed Search Definition:

(a) that the proper drafting of this document will require considerable skill and experience on the part of the author;

(b) that it will hardly be possible to cover *all* aspects of the invention in the condensed form of the Search Definition.

My answers to these objections are as follows:

Re (a):

Admittedly, a correct and exhaustive drafting of the Search Definition will, in many cases but not always, be a difficult job. But I contend that it will be no more difficult than proper claim drafting, and that any qualified patent expert will be able to do it.

Re (b):

A search which reveals anticipations of the specific features stated in item 4 of the Search Definition will generally suffice for the subsequent assessment by the national patent offices of the patentability and scope of the claims. In fact, if the novelty of the more or less specific embodiments of the invention explained in the Search Definition is wholly or partly anticipated, a broader aspect of the invention which may be comprised in the claims subsequently filed will generally also be anticipated or otherwise be considered as not patentable.

Whether or not these objections are really pertinent is, of course, a matter of personal judgement. But "the proof of the pudding is in the eating," and I suggest that the reader should withhold his judgement until he has tasted and digested the following samples of the pudding:

Examples of Search Definitions

EXAMPLE 1

Search Definition: LEGO-I

A. *The invention relates to:* Toy building sets comprising a plurality of building elements as illustrated in Figs. 1-7.

B. *State of the art:* Toy building blocks made by injection moulding of a thermo-plastic material and comprising a hollow box-shaped body having:

I. a bottom wall (a, fig. 1).
II. side walls (b, figs. 2-7).
III. end walls (c, figs. 1-7).
IV. coupling studs (primary projections (p. figs. 1, 3, 4 and 6).

The primary projections (p) extend from the bottom face (a) of the block and are arranged so as to engage the internal faces of the side- and end walls (b and c) of an adjacent block, when two such blocks are assembled. *Example:* British Patent No. 529,580.

C. *Object of the invention:* To improve the previously known blocks so as to obtain the following advantages:

(1) increased clamping effect between a pair of assembled blocks;
(2) the possibility of interlocking a pair of blocks in staggered or offset positions as shown in figs. 4 and 5.

D. *Novel features according to the invention:*

(1) The arrangement of additional coupling studs (secondary protection *s*, figs. 1-7) within the cavity of the block in such a manner that, in a pair of assembled blocks, in the position shown in figs. 1 and 2, the secondary projections *s* of one block (B, fig. 1) will be clamped between pairs of primary projections *p* of the other block A.

(2) The secondary projections *s* are of cylindrical (tubular) shape (figs. 1-5).

(3) The secondary projections (S_x, fig. 6) are cross-shaped in section.

(4) The secondary projections each consist of four arcuate parts shaped and arranged as shown in fig. 7, S_y.

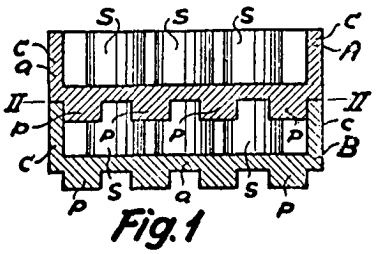


Fig. 1

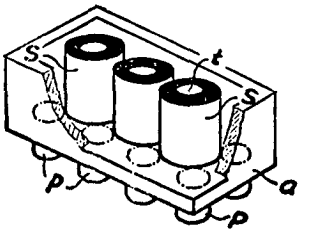


Fig. 3

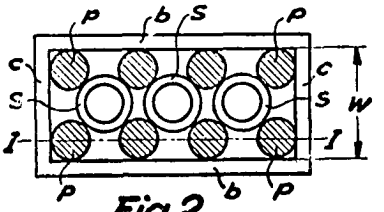


Fig. 2

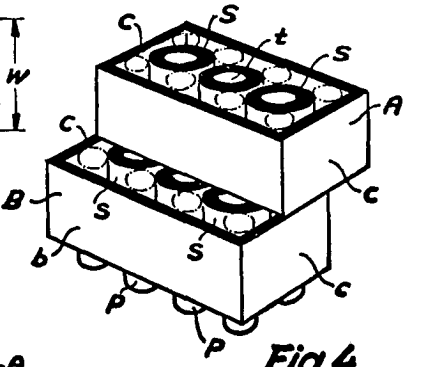


Fig. 4

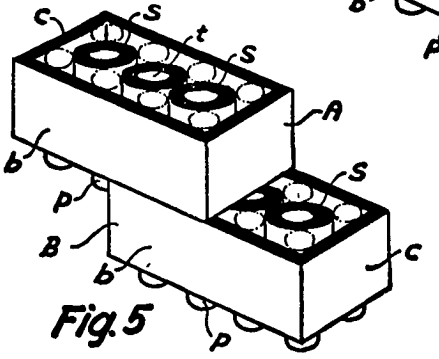


Fig. 5

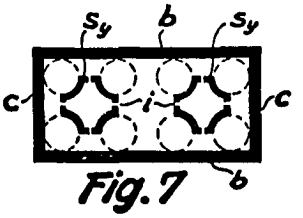


Fig. 7

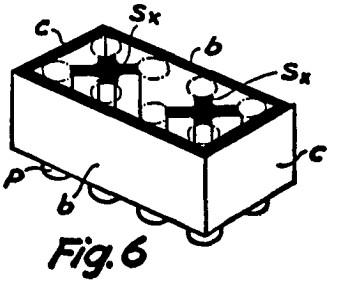


Fig. 6

EXAMPLE 2

U.S. Patent No. 3,130,701

Search Definition

A. *The invention relates to* icebreakers.

B. *State of the art:* Conventional icebreaking vessels crushing the ice from above by running the heavy vessel up on the ice floe, thereby crushing it by its weight. (*Examples:* U.S. Patent Nos. 658,265, 808,634, 1,321,383, 1,500,000, 2,277,175, 2,722,021, 3,009,434; French Patent No. 1,148,743; and British Patent No. 13,477).

C. *Object of the invention:* To provide a simpler and cheaper apparatus which will reduce the cost of icebreaking to a minimum.

D. *Novel features according to the invention:*

(1) The ice is broken *from below* by means of a submersible vessel, Figs 1-5, having a reinforced shell A comprising a cam D, and provided with an inflatable bottom B. The breaking force is generated by increasing the buoyancy of the bottom B by inflating it by means of compressed air.

(2) Alternatively, the buoyancy may be increased by varying the contents of water ballast in tanks E, Fig. 1

(3) The shell A, Fig. 4, is provided with a feeler element 15 connected with a shift valve, Figs. 7 and 8. When the feeler 15 is depressed by contacting the underface of the ice during breaking thereof, the valve, Figs. 7 and 8, is actuated so as to admit compressed air to B thereby inflating the bottom B and increasing the buoyancy of the vessel A so as to break the ice. When the ice is broken, the feeler 15 will be discharged, and the spring 15a will move the valve, Figs. 7 and 8, into the position wherein the supply of compressed air is cut off, and the air is exhausted from the bottom B. This provides a sort of jet propulsion whereby the submersible vessel A, B is moved to another position below the ice floe.

Note: If features (1) and (2) were not anticipated by prior art, a much broader claim would have been allowable. The USA claim was based substantially on feature (3). A properly drafted Search Definition would eliminate the need for amendment of claims in the international application envisaged by the PCT.

Claim 1:

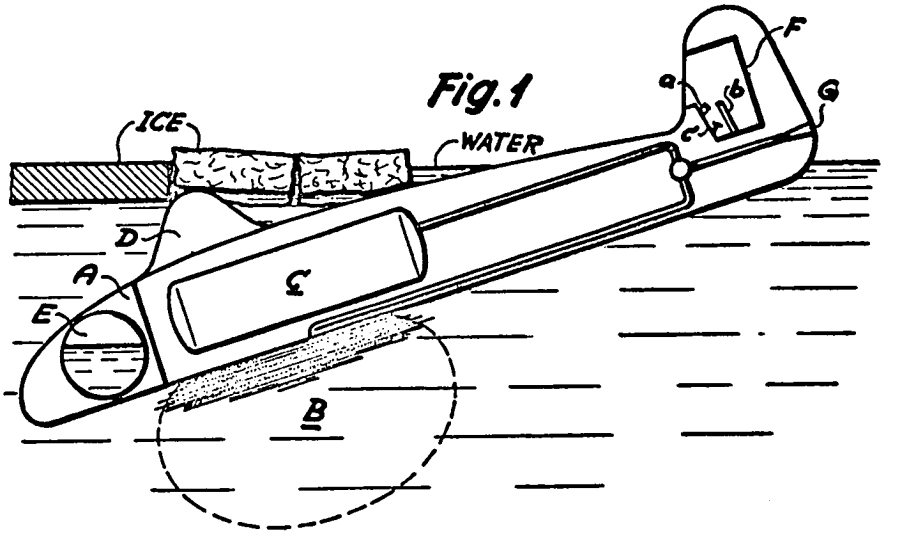
In an icebreaker a source of compressed air, a submersible vessel including a reinforced icebreaking shell at the upper face thereof and an expansible and inflatable bottom, means for automatically inflating said bottom when said icebreaking shell is subjected to the pressure of the ice, said means for automatically inflating said bottom comprising a compressible spring loaded feeler element in said icebreaking shell, a shift valve operably associated with said feeler element and connected with said source of compressed air and said inflatable body for inflating the expansible bottom when the valve is moved into one position by depression of the feeler element and to evacuate said bottom when the valve is moved to another position by release of the pressure on the feeler element.

April 28, 1964 P. O. LANGBALLE 3,130,701

ICEBREAKERS

Filed Aug. 14, 1962 2 Sheets-Sheet 1

Fig. 1



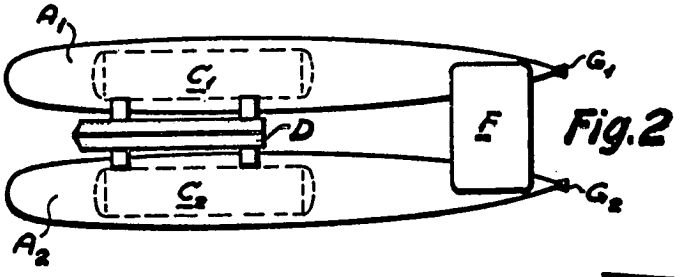


Fig. 2

Fig. 9

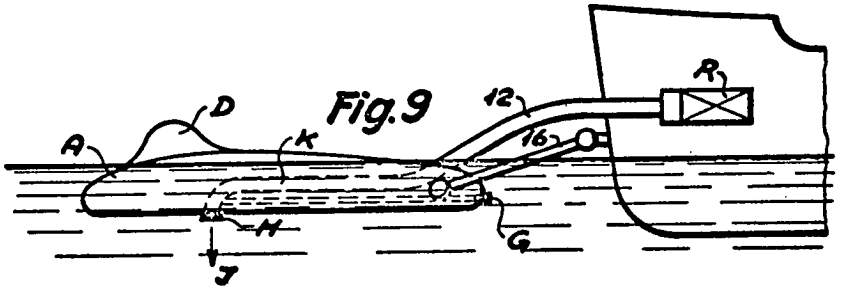
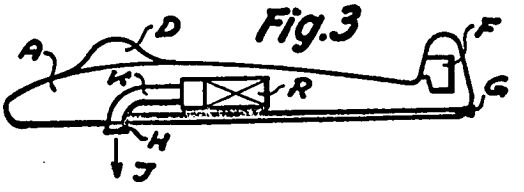


Fig. 3

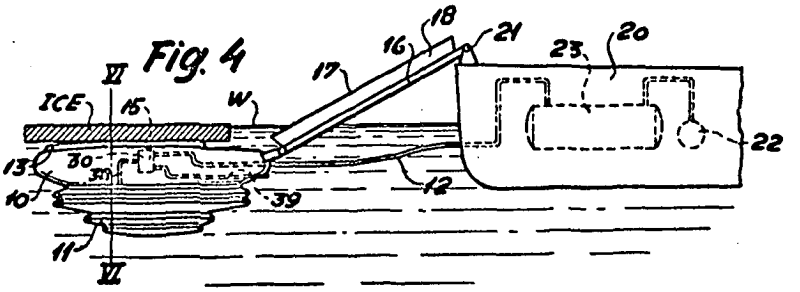


April 28, 1964 P. O. LANGBALLE 3,130,701

ICEBREAKERS

Filed Aug. 14, 1962 2 Sheets-Sheet 2

Fig. 4



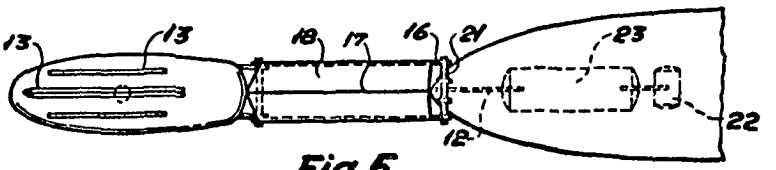


Fig. 5

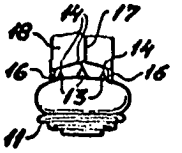


Fig. 6

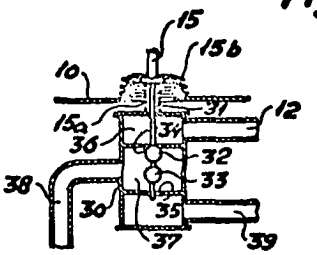


Fig. 7

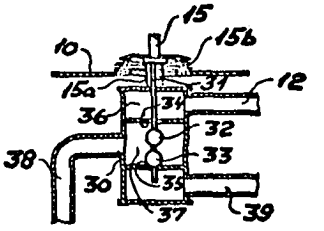


Fig. 8

EXAMPLE 3

British Patent No. 958,432

Search Definition

A. *The invention relates to* toy building elements.

B. *State of the art:* Toy building sets comprising elements as defined in British Patent No. 866,557.

C. *Object of the invention:* To provide additional elements so as to enable such toy building sets to be used for building vehicles, mills or other constructions having rotable members.

D. *Novel features according to the invention:* The hollow interior of the known elements (Figs. 2 and 3 of Patent No. 866,557) forms a bearing housing for a bush (15, Fig. 10) adapted to receive a spindle (19) of a rotable element (wheel 20). The spindle (19) is held by friction in the bush (15) which is journalled in channels 8 or 9 (Fig. 2) formed between ribs (7 or 6 respectively). The channels have a square cross-sectional area (Fig. 7) defined by four walls comprising the inner face opposite the open face of the element, one pair of ribs (7) and a fourth wall formed by the surface of an insert (10, Fig. 6) having upwardly extending projections (11) adapted to engage the ribs 7 (Fig. 7). The bottom face of the insert (10, Fig. 5) is provided with tubular projections (14) corresponding to the secondary projections *s* of the element according to Patent No. 866,557. The walls of the element are provided with holes 12 and 13 in central alignment with each of the channels (9 and 8 respectively) for receiving the spindle of the rotable element (19, Fig. 10) to be inserted in the bush 15 journalled in the channel.

Claim 1:

A toy building set element comprising a cuboidal hollow body open at one face and having outwardly extending studs for engagement with other elements of the set, in which the hollow interior of the element forms a bearing housing for a bush, adapted to receive a spindle of a rotable element through a hole in a wall of the element.

958432 COMPLETE SPECIFICATION

1 SHEET This drawing is a reproduction of the Original on a reduced scale

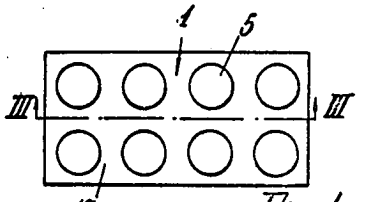


Fig. 1

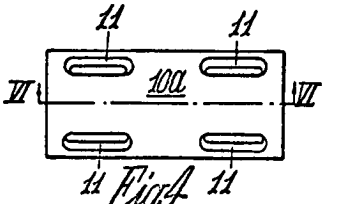


Fig. 4

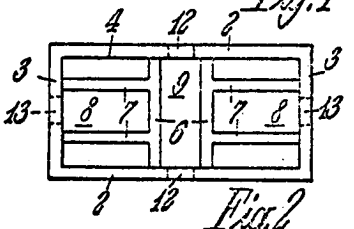


Fig. 2

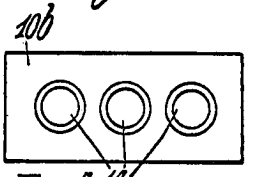


Fig. 5

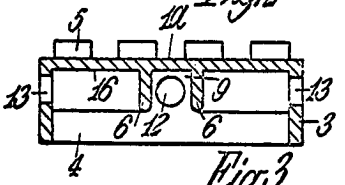


Fig. 3

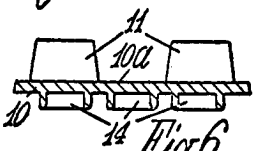


Fig. 6

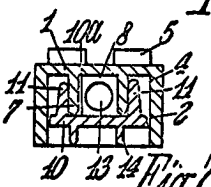


Fig. 7

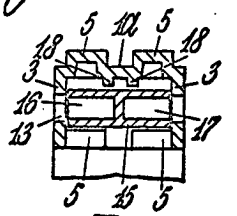


Fig. 8

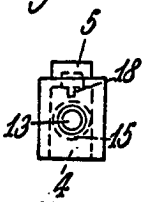


Fig. 9

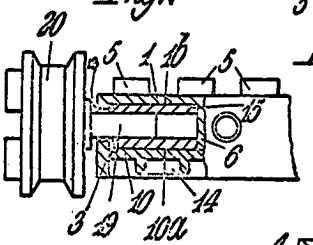


Fig. 10

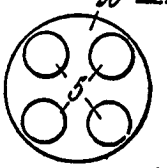


Fig. 11

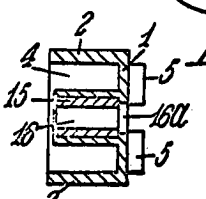


Fig. 12

EXAMPLE 4

British Patent No. 1,017,034

Search Definition

A. *The invention relates to* rotable turntable element for toy building sets Int. Cl. A 63 h 33/34.

B. *State of the art:* Toy building sets as defined in British Patent No. 866,557.

C. *Object of the invention:* To provide for a rotable connection between adjacent structures built up of elements as defined in British Patent No. 866,557.

D. *Novel features according to the invention:* The turntable consists of a pair of main elements (10 and 20) positioned on a common axis (Figs. 1 and 6) and in sliding contact with each other, and a locking member (30) arranged to hold the main elements (10 and 20) together.

Claim 1:

A rotable element for a toy building set of the kind referred to, comprising a pair of main members adapted to be positioned on a common axis and in sliding contact with each other for relative rotation about the common axis, at least one of the main members being provided with means for frictionally engaging complementary means on other elements of the toy building set, and a locking member arranged to hold the main members together, the locking member being arranged to be inserted through a central axial hole in a first of said main members and to be gripped in an annular coupling recess in the second of said main members with an annular locking surface on the locking member bearing slidably against an annular locking surface on the first main member to hold the main members together.

1017034 COMPLETE SPECIFICATION
1 SHEET *This drawing is a reproduction of the Original on a reduced scale*

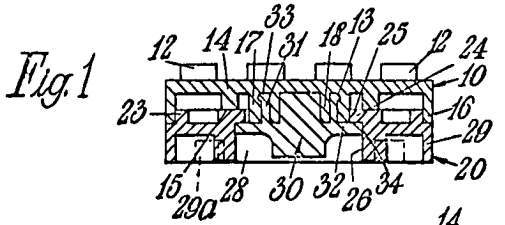


Fig.1

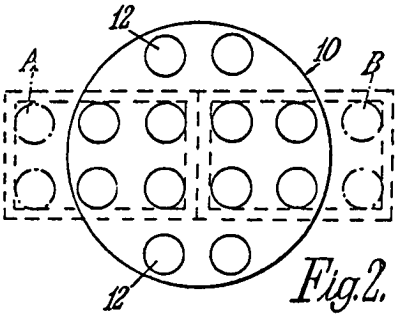


Fig.2.

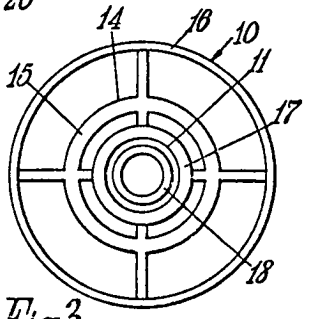


Fig.3.

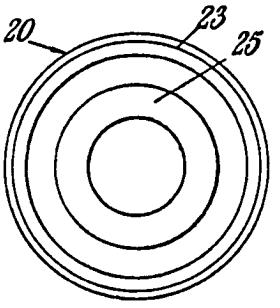


Fig.4

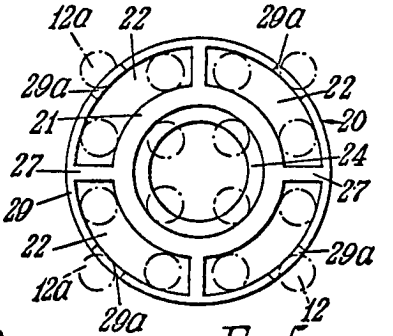


Fig.5.

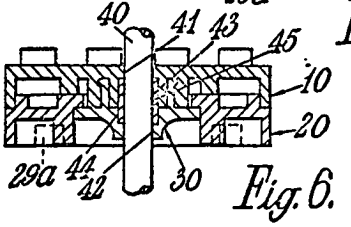


Fig.6.

EXAMPLE 5
British Patent No. 690,279

Search Definition

A. *The invention relates to* radiant heating and cooling systems.

B. *State of the art:* Sub-ceilings comprising a plurality of metal plate elements (preferably aluminum plates) heat conductively associated with a plurality of pipes suspended below the ceiling of a room and adapted to carry hot water, steam or a cooling fluid so as to heat or cool the metal plates thereby providing a radiant heating or cooling panel. Alternatively, the pipes may be substituted by elongated electric heating elements (bars) or such elements may be located within the pipes.

C. *Object of the invention:* To combine such sub-ceilings with means for acoustic damping of the room so as to enable the installation of the radiant heating and cooling system and the sound damping to be mounted in one operation.

D. *Novel features according to the invention:* The metal plate elements normally used for radiant heating and cooling panels are made of thin perforated metal sheets and provided with a sound damping material at their upper face so as to constitute a combined radiant heating (or cooling) and sound damping sub-ceiling.

Claim 1:

A radiant heating or cooling system for rooms, comprising a heat-distributing panel made of heat-conducting material, preferably sheet aluminum, arranged in heat-exchange relationship with spaced heating or cooling pipes, said panel being made sound-pervious by providing it with a large number of apertures or the like extending therethrough and sound-absorbing material arranged behind the heat-distributing panel.

690,279 COMPLETE SPECIFICATION
1 SHEET

This drawing is a reproduction of the Original on a reduced scale.

Fig. 1.

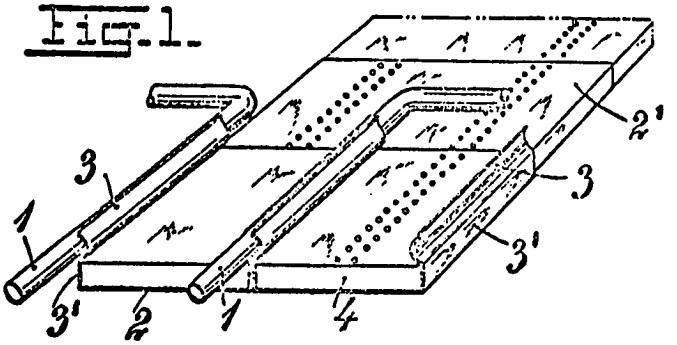


Fig. 2.

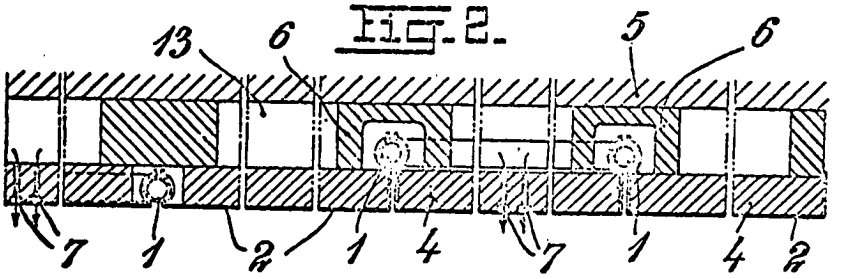
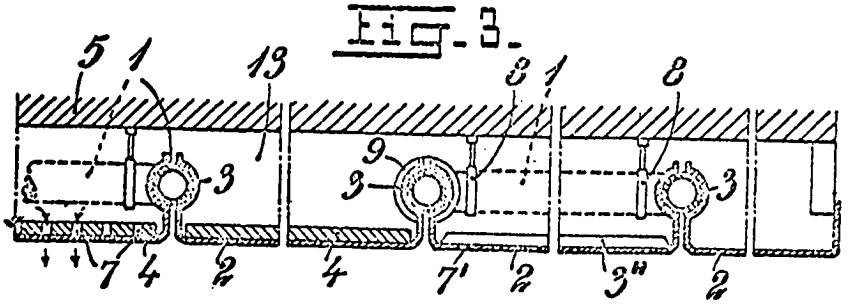


Fig. 3.



Human Rights and Protection of Intellectual Property

HARRY GOLDSMITH*

SUMMARY

IN THE UNIVERSAL DECLARATION OF HUMAN RIGHTS, which was adopted by the General Assembly of the United Nations on December 10, 1948, for the first time in history it was declared internationally that the protection of the moral and material interest in any invention, literary, scientific, or artistic work of an individual is a basic fundamental human right which should be universally and effectively recognized, observed and guaranteed. In this, the twentieth anniversary of the Declaration, the legislative history of its Article 27, which sets forth this right, is brought to light. Also, there is examined the stimulating role which this right can play in the adoption, development, and strengthening of intellectual property protection systems on a national and international basis.

* The author is Patent Counsel of CIBA Corporation, Summit, New Jersey.

BACKGROUND

"EVERYONE HAS THE RIGHT to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

It is in these words that the Universal Declaration of Human Rights establishes as a fundamental human right, the right of protection for an inventor for his invention, a writer for his writings, and an artist for his works of art.

Insofar as I have been able to determine in the literature of intellectual property, there has been no recognition of this human right which is set forth in Article 27 of the Universal Declaration of Human Rights. The Declaration was adopted by the General Assembly of the United Nations on December 10, 1948. On this, the twentieth anniversary of the adoption and proclamation of the Declaration—which is being commemorated by the observance throughout the world, of 1968 as International Year for Human Rights—it would seem most fitting to bring to light this human right which seemingly has been overlooked by those concerned with intellectual property and its protection.

President Johnson, in proclaiming 1968 as Human Rights Year, called the Declaration "an historic document of freedom that expresses man's deepest beliefs about the rights that every human being is born with, and that no government is entitled to deny."

It is in the Declaration of Human Rights that it is declared internationally for the first time that the protection of any scientific, literary or artistic production of an individual is a basic fundamental human right which should be universally and effectively recognized, observed and guaranteed.

How did this right get into the Declaration? What is its legislative history? What is its relation to patent and copyright systems and the present international arrangements in existence, and those being considered? Should Article 27 encourage countries to improve and strengthen the protection given to intellectual property and give them pause when they consider taking action which would weaken or be inimicable to such protection?

Those concerned with the protection of intellectual property—

patent attorneys, trademark attorneys and copyright attorneys—are well aware that, with few exceptions, most of the 150 national governments of the world have some provision in their laws for protecting inventions, literary or artistic productions by means of patents, copyrights and trademarks. Our own constitution provides in Article I, Section 8, that:

> The Congress shall have the power . . . to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

It is on the authority of this constitutional provision that Congress has enacted our patent and copywright laws. But the Constitution does not compel Congress to establish such a law. No country, so far as could be determined, has stated in its basic law that the protection of intellectual property rights is a *fundamental human right.* The International Declaration of Human Rights declares it so and promotes it on an internationally guaranteed basis.

Although the General Assembly of the United Nations, as long ago as December 10, 1948, adopted and proclaimed the Universal Declaration of Human Rights, most of the various Human Rights Conventions incorporating the principles set forth in the Declaration of Human Rights remain to be ratified by the United States. The Declaration is only a statement of objectives—"a common standard of achievement for all peoples and all nations" as President Johnson has said. It is not, however, a treaty and involves no legal obligations. That is why President Johnson, in appointing a Presidential Commission for the Observance of Human Rights Year, headed by Ambassador-at-Large, W. Averell Harriman, expressed the hope that the Senate would ratify these conventions which have been adopted by the United Nations or its specialized agencies in the past twenty years, and by many nations of the world.

Article 27 of the Declaration is embodied in the International Covenant on Economic, Social and Cultural Rights as Article 15 dealing with "rights relating to culture and science" and which reads as follows:

> 1. The States Parties to the present Covenant recognize the right of everyone:
>
> (*a*) To take part in cultural life;
>
> (*b*) To enjoy the benefits of scientific progress and its applications;
>
> (*c*) To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.
>
> 2. The steps to be taken by the States Parties to the present

> Covenant to achieve the full realization of this right shall include those necessary for the conservation, the development and the diffusion of science and culture.
>
> 3. The States Parties to the present Covenant undertake to respect the freedom indispensable for scientific reseach and creative activity.
>
> 4. The States Parties to the present Covenant recognize the benefits to be derived from the encouragement and development of international contacts and cooperation in the scientific and cultural fields.

This is one among the Human Rights Conventions that remain to be ratified by the United States.

Before discussing Article 27, it may be desirable to place it in its frame of reference which is set forth in the Preamble of the Declaration. I am quoting the preamble because I know of no better way of expressing the goals, purposes and objectives of the Declaration than in the clear, simple, direct and noble language of the preamble itself:

> Whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,
>
> Whereas disregard and contempt for human rights have resulted in barbarous acts which have outraged the conscience of mankind, and the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people,
>
> Whereas it is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law,
>
> Whereas it is essential to promote the development of friendly relations between nations,
>
> Whereas the peoples of the United Nations have in the Charter reaffirmed their faith in fundamental human rights, in the dignity and worth of the human person and in the equal rights of men and women and have determined to promote social progress and better standards of life in larger freedom,
>
> Whereas Member States have pledged themselves to achieve, in co-operation with the United Nations, the promotion of universal respect for and observance of human rights and fundamental freedoms,
>
> Whereas a common understanding of these rights and freedoms is of the greatest importance for the full realization of this pledge,
>
> *Now, Therefore,*
>
> THE GENERAL ASSEMBLY
>
> proclaims
>
> THIS UNIVERSAL DECLARATION OF HUMAN RIGHTS as a common standard of achievement for all peoples and all nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms and by progressive measures, national and international, to secure their universal and effective recognition and observance, both among the peoples of Member States themselves and among the peoples of territories under their jurisdiction.

The Preamble is followed by thirty articles setting forth the many human rights, the "universal and effective recognition and observance" of which the Declaration hopes will be secured and guaranteed.

These rights have been compared with the Bill of Rights of our Constitution—and there is a great similarity between a number of them. Interestingly enough, however, there are many more rights set forth in the Declaration, to which "everyone is entitled" (among which is the protection of intellectual property), than there are in the Bill of Rights.

The Legislative History of Article 27

The Charter of the United Nations, which became effective October 24, 1945, reaffirmed "faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small." To implement this provision of the Charter, a Human Rights Commission was established in 1946. After two years of study and deliberation, it formulated a draft of the Declaration of Human Rights. This was presented to the General Assembly which adopted it without a dissenting vote on December 10, 1948. Much of the leadership in the drafting and adoption of the Declaration came from Mrs. Eleanor Roosevelt, our first representative on the U.N. Commission of Human Rights.

A short "legislative history" of Article 27 appears in the United Nations publication, *These Rights and Freedoms* (1950). Here are the stages of its evolution:

A first draft was prepared by the Secretariat of the U.N. and it read as follows:

> Everyone has the right to participate in the cultural life of the community, to enjoy the arts and to share in the benefits of science.

Then in the following order came successive drafts as follows:

> Drafting Committee, First Session:
>
> Everyone has the right to participate in the cultural life of the community, to enjoy the arts, and to share in the benefits that result from scientific discoveries.
>
> Commission on Human Rights, Second Session:
>
> Everyone has the right to participate in the cultural life of the community, to enjoy the arts and to share in the benefits that result from scientific discoveries.
>
> Commission on Human Rights, Third Session:
>
> Everyone has the right to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement.

Now the draft was presented to the General Assembly, where the following occurred:

> Mr. Campos Ortiz (Mexico) pointed out that the Declaration had already recognized the rights of the wage earner, the family, the mother and the child. If the Committee wished to avoid a serious omission, the rights of the individual as an intellectual worker, scientist, or writer must be recognized.
>
> The Mexican delegation, he continued, thought that the time had come to recognize that without the contribution of that form of human activity, no social progress would be possible. No article so far dealt with the particular rights of the intellectual worker. The objection might be raised that in including this recognition the Committee was dealing with the rights of one particular category of people only. But was not that also true of property rights and the rights of the wage-earner? It might also be said that the general provisions covering the labourer adequately protected intellectual workers. Mr. Ortiz therefore moved an amendment to add a second paragraph that would ensure protection of the moral and material interest in any invention, literary, scientific, or artistic work of which an individual was the author.
>
> He received support from, among others, Mr. Perez Cisneros (Cuba) who thought that the idea was a new and important one which should rightly be included in the Declaration.
>
> Mr. de Arechaga (Uruguay) referred to an amendment by the USSR which declared that 'the development of science must serve the interests of progress and democracy and the cause of international peace and cooperation.' Science, he maintained, should follow a process of independent evolution and should not depend on political considerations which, very often, were influenced by science.
>
> A number of amendments were proposed, but after the USSR proposal had been rejected, a compromise text for the Article, suggested by China, was adopted paragraph by paragraph.
>
> Finally, the whole Article, as amended, was adopted by 36 votes to none, with 4 abstentions.
>
> The General Assembly adopted the article unanimously.

FINAL TEXT (as it appears in the Universal Declaration of Human Rights):

> 1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts, and to share in scientific advancement and its benefits.
>
> 2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

It is indeed interesting to note that a small country like Mexico conceived of the idea of establishing as a human right the protection of the moral and material interest in any invention, literary, scientific or artistic work of which an individual was the author, and giving that right international recognition—and that China provided the final text that was unanimously adopted.

It is most fitting that intellectual property should be given universal

recognition, since once an invention, literary, scientific or artistic work is revealed, it is "expansible over all space"—it leaps all national boundaries and pervades the ends of the earth. As Thomas Jefferson stated and as quoted by our own Supreme Court in the recent decision of *Graham* v. *John Deere Co.,* (86 Sup.Ct. 684, 148 USPQ 459 [1966]):

> Stable ownership is the gift of social law, and is given late in the progress of society. It would be curious, then, if an idea, the fugitive fermentation of an individual brain, could, of natural right, be claimed in exclusive and stable property. If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening mine. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been peculiarly and benevolently designed by nature. When she made them like fire, expansible over all space, without lessening their density in any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot, in nature, be a subject of property. Society may give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility, but this may or may not be done according to the will and convenience of the society, without claim or complaint from anybody. (VI Writings of Thomas Jefferson [Washington ed.], at 180 [1814].)

In Jefferson's view the patent grant was not designed to secure to the inventor his natural right in his discoveries, but rather it was a reward, an inducement to bring forth new knowledge. While Thomas Jefferson rejected a natural rights theory in intellectual property rights, he clearly recognized the social and economic rational of the patent system, since he also wrote:

> Certainly an inventor ought to be allowed a right to the benefit of his invention for some certain time *** Nobody wishes more than I do that ingenuity should receive liberal encouragement.

Early in man's history, recognition was given to the individual who was creative. But such recognition was not given as a matter of right, but more or less as a privilege by the ruler, king, duke, duchess, or patron of the arts, or by special decree. In the 1600's, Britain adopted a Statute of Monopolies. This curtailed the practices of the Crown granting monopolies to court favorites in goods or businesses which

had long been enjoyed by the public. One such monopoly on tea sparked the American Revolution. However, it did make exceptions for new manufactures (inventions) introduced into the realm.

In 1790 the first U. S. patent law was enacted. Other countries also introduced patent laws. As the idea of protection for the inventor grew—the desire and need for some form of international protection arose. The protection afforded by the nations only extended to their own boundaries, and discrimination arose between the home-born and the foreign from other lands who sought protection.

The Paris and Berne Unions

A number of countries of the world got together to consider the problems, and in 1883 established the Paris Union, which deals with patents and trademarks, and in 1886 the Berne Union, which deals with copyrights. While these did not establish an international patent or copyright, they did go far in eliminating discrimination between the domestic and foreign inventors and others. They set up some ground rules, and conveyed the important right of priority. Thus, an inventor filing for a patent in his home country was given a year in which to file in any other member state of the Paris Union, and his application in the foreign country with respect to any other inventor would have as its priority date the date on which he filed in his home country. Also the Paris Union guaranteed equal national treatment for foreign and home-born. The foreign patentee was entitled to the same treatment under the law with respect to his patent rights as the national in his country. This was a unique principle in international law since equal national treatment is not based on reciprocity, the usual case in treaties. The equal national treatment provided by the Paris Union, in effect, embraces one of the great texts of scripture which appears in several places in the Old Testament:

> Ye shall have one manner of law, as well for the stranger, as for the home-born. (Leviticus XXIV, 23, and somewhat similarly stated in Exodus XII, 49)

More than 80 nations now belong to the Paris Union and 58 to the Berne Union. In more recent years, under the aegis of the United Nations, there was established the Universal Copyright Convention—which further extends copyright protection to authors throughout the world.

Patent Cooperation Treaty

The work of protecting the inventor and the author on the international level is continuously moving forward. In May, 1967, a draft of a Patent Cooperation Treaty (PCT) was published. It is intended to reduce the duplication of effort both for applicants and national patent offices in countries throughout the world in obtaining protection of the rights of inventors, eliminate delays, simplify searching, and reduce costs. The heart of PCT in its Phase I is the provision of a single international search and search report for the same invention, rather than the duplication of searching in each examination country where an application is filed. In Phase II, consideration is given to also providing a preliminary examination report indicating whether the invention is considered patentable.

PCT is now in the process of being examined, analyzed, and revised by experts, governmental and private, meeting from time to time in Geneva—and it is planned to have a revised draft embracing consensus perhaps within the next year.

World Intellectual Property Organization

In a most significant spirit of international cooperation, some 70 countries of the world in a month-long conference in Stockholm (June 12 to July 14, 1967) created a Convention Establishing the World Intellectual Property Organization (WIPO).

Now the nations of the world are being called upon to ratify the convention. The feat of drafting this Convention is indeed amazing when it is considered that countries of such widely divergent economic, political, cultural and social philosophies—as the United States, the USSR, Bulgaria, Cuba, Czechoslovakia, West Germany, Gabon, Hungary, Iran, Ireland, Israel, Italy, Ivory Coast, Japan, Madagascar, Indonesia, Holy See (Vatican), Morocco, and Rumania, worked harmoniously together to establish WIPO. To WIPO is assigned the noble purpose of promoting the protection of intellectual property throughout the world in order to effectively encourage creative activity in all countries, thereby contributing to the spiritual enrichment and the material well-being of mankind as a whole.

Another purpose: To ensure administrative cooperation among the various existing unions concerned with patents, trademarks and copyrights, without in any way prejudicing their independence.

In pursuing these objectives, the participants expressed the idea that

they were inspired by even a loftier purpose, namely the desire to contribute to better understanding and cooperation among States. The Convention starts out with the expression of that noble purpose in the Preamble, which reads as follows:

> 1. To contribute to better understanding and cooperation among States for their mutual benefit on the basis of respect for their sovereignty and equality.
> 2. To encourage creative activity, to promote the protection of intellectual property throughout the world.
> 3. To modernize and render more efficient the administration of the Unions established in the fields of the protection of industrial property and the protection of literary and artistic works, while fully respecting the independence of each of the Unions.

WIPO defines intellectual property in the widest sense, including among others:

> (a) Inventions in all fields of human endeavor.
> (b) Scientific discoveries (which are not yet protected as intellectual property in the majority of countries).
> (c) Literary, artistic, and scientific works.
> (d) All other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

African and Malagasy Industrial Property Office

In a most sophisticated step for developing nations, which has not yet been taken by any group of developed nations,[1] 12 African and Malagasy states, which had recently obtained their independence, established in 1962 a common system of industrial property protection (patents and trademarks), and a single organization entitled the African and Malagasy Industrial Property Office (OAMPI). This central patent office which is headquartered at Yaounde (Federal Republic of Cameroon) grants one common patent and one common trademark effective in all the 13 member countries (recently, Togo became the thirteenth country to join this Union).

Mr. Denis Ekani, who is Director General of this multinational Patent Office, told in an article[2] why it was set up:

---

[1] The draft European Patent Convention proposing a Common Market Patent, and the Nordic Patent System proposing in effect a common patent for the four Scandinavian countries are still under discussion and review.

[2] Ekani, Denis, "The African and Malagasy Industrial Property Office," *Industrial Property,* (Monthly Review of the United International Bureaux for the Protection of Intellectual Property—BIRPI), 5th Year, No. 9 (September 1966), p. 220.

Contrary to what one might think, industrial property is not merely a simple legal problem. It is an essential element in economic life, closely linked with the production and circulation of goods of all kinds, in all countries, regardless both of their degree of development and their political and economic structure.

Patents play such an important role in technical progress, in the transfer of technology and in industrialization, as shown by a recent study of the United Nations, that their protection cannot be neglected in the developing countries.

As to trademarks, by distinguishing the products of different enterprises, these enable the consumers to make an indispensable selection and to make a choice between manufacturers. Trademarks act as a guarantee of the quality of the goods. Backed by an ever-increasing publicity, trademarks can open up new markets for national production. Therefore, they constitute a decisive element in both the qualitative and quantitative growth of national production. For these two reasons alone, their protection must be a part of the legal and economic armament of the new States.

The desire to cooperate between the countries concerned, the fact that direct relationships were being set up between them in related fields, the desire to ensure to patent and trademarks owners effective protection of their rights and at the same time respect the national rights of the States, were sufficient reasons in favour of establishing a common organization, compatible with the various economic systems likely to be adopted by the member countries and yet independent of other organisms of a political or economic nature.

Thus, a whole group of States which have recently acceded to independence have shown the interest which they feel for the protection of industrial property.

Conclusion

When one considers the activities both national and international that have a bearing upon the human rights expressed in Article 27, one can hopefully say that peoples and nations, individuals and organs of society are striving to promote respect for these rights and by progressive measures, national and international, to secure their universal and effective recognition and observance.

The Universal Declaration of Human Rights, the various unions, OAMPI, and the proposed PCT, WIPO, European and Nordic Patent Conventions hold the promise, by encouraging creative activity and promoting the international protection of the results of such creativity, of bringing to fruition the ultimate goal: a universal patent and a truly universal copyright which will, throughout the world, legally insure the individual's "right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author."

On this, the occasion of International Year for Human Rights, it

would seem only fitting that we, especially those who are concerned with the protection of intellectual property, deepen our commitment to the defense of, and our efforts for, the full and effective realization of this right, as well as human rights in general, both among our own people and among all the peoples of the world. One step we can take in this direction is to urge the Senate to ratify the various Human Rights Conventions.

STUDENT PAPERS

By making available student papers, students will receive an incentive and our readers will appreciate the evidence of scholarly development in the fields of interest. These papers are carefully reviewed by the Editorial Committee and other specialists, and helpful suggestions are made to the students as part of the educational function of *IDEA*. The positions taken by students are not necessarily those of the Research Institute. The Research Institute invites educational and research institutions to submit informative student manuscripts on the patent, trademark, copyright, and related systems.

In Rem Invalidity: A Solution in Search of a Problem?*

ALTON D. ROLLINS

SUMMARY

NUMEROUS RECENT PROPOSALS have been directed toward increasing the conclusiveness of a court decision holding a patent invalid. These proposals have been based on the assumptions that: (1) relitigation on a patent which previously has been declared invalid represents a substantial burden on the courts and the public, and (2) such litigation is inequitable to the public in some manner.

This paper attempts to explore the facts and theories underlying these assumptions, and concludes that the cure is likely to be a greater evil than the supposed problem.

* This paper was chosen to represent The George Washington University in the 1968 Patent Office Society Student Award Competition. The author while a second-year law student submitted the paper in fulfillment of the requirements for Legal Writing, a course conducted by Professor L. James Harris in The National Law Center of The George Washington University.

INTRODUCTION

THE PATENT RIGHT IS to a large extent *sui generis*. It is basically the grant of the bare right to exclude others from the tangible embodiments of certain intangible ideas which are deemed to be of sufficient value to society to justify the grant. The right is granted by the sovereign by an *ex parte* proceeding in which only the originator of the idea and the representative of the sovereign participate. But the right when granted is effective within the sovereign's territory against all others, regardless of whether they were parties to the granting process. And the grant is a conditional one. It is revoked (invalidated) if subsequent developments indicate that it was improperly granted in the first place. It may be lost by certain types of conduct by the patentee after the right is properly granted (e.g. laches, misuse, unclean hands, et cetera). While the patent is generally an offensive weapon, its use must be actively defended upon most occasions when it is employed. It remains highly susceptible to attack throughout its life.

This unique nature of the patent property has raised unique problems. Among these problems is that of controlling abuses of this powerful weapon. One proposed solution to this problem is the *in rem* invalidity proposal, which will be investigated in this paper.

BACKGROUND AND ELEMENTS OF THE MULTIPLE LITIGATION PROBLEM

THE HIGH VALUE OF PATENT RIGHTS *vis-á-vis* THE HIGH COST OF PATENT LITIGATION

Although the patent right is somewhat tenuous and conditional, it nevertheless can be extremely valuable. The fair market value as of March 1, 1913, of Burton patent 1,049,667, for a process of cracking gasoline, was stipulated as $70,000,000.[1] The average gain for each patent used has been estimated at $1,200,000 throughout its life, an average annual gain of about $70,000.[2] A judgement for $3,010,077.16 damages was rendered in the *Graver* v. *Linde* litigation,[3] but the

[1] Standard Oil Company v. Commissioner of Internal Revenue, 129 F. 2d 363, 373 (7th Cir. 1942).

[2] Gorn, "Economic Value of Patents," *Encyclopedia of Patent Practice and Invention Management.*

[3] Union Carbide Corp. v. Graver Tank & Mfg. Co., Inc., 282 F. 2d 653, 127 *USPQ* 3 (7th Cir. 1960).

amount was somewhat modified in later proceedings.[4] Numerous awards of damages in excess of $100,000 have been reported.[5]

On the other hand, patent litigation is expensive and time-consuming. In *Texas Co.* v. *Globe Oil & Refining Co.*,[6] the statutory costs[7] alone amounted to $64,068.53. Since the court found the patent in suit valid but not infringed, these costs were taxed against the patentee. The plaintiff's costs in the *Graver* v. *Linde* litigation from 1945 to 1950 were stated as $687,226.17.[8] That figure represents only a small part of the time and expense of that litigation. The complaint was filed in October 1945. The suit was heard and reheard by the U. S. Supreme Court in 1949-1950, and the litigation was continuing with regard to damages in 1965.[9] Although attorney's fees were disallowed by the appellate court, the lower court had awarded reasonable attorney's fees of $500,000. The average minimum cost of conducting a patent infringement suit to a contested judgement has been estimated to be about $50,000 for each side, or $100,000 for both parties, with the litigants in major suits sometimes spending more than a million dollars each.[10]

The threat of a high judgement for damages and the virtual certainty of long and expensive litigation combine to form a powerful weapon in the hands of a patentee who has the economic power to wield it. Of course, the high cost of litigation is also a burden on the patent owner, but he generally has more control over the litigation. With the exception of certain declaratory judgement suits, the patentee is the aggressor. He can press on or withdraw at will, whereas the defendant must defend himself or suffer default judgement. Moreover, the threat of an affirmative judgement against the patentee on a counterclaim is virtually nonexistent, although such might be possible on theories of antitrust, misuse of legal process, et cetera.

Why The Patentee is Fair Game for Regulation of Litigation

Although the liklihood of abuse by continued litigation on a patent which has been declared invalid is probably less than the liklihood of

---

[4] Union Carbide Corp. v. Graver Tank & Mfg. Co., Inc., 345 F. 2d 409, 145 *USPQ* 240 (7th Cir. 1965).

[5] Wilson *et al.*, "Accounting After Infringement Suits—Damages, Attorney's Fees, Court Costs," *Encyclopedia of Patent Practice and Invention Management.*

[6] 114 F. Supp. 144 (N. Ill. 1953).

[7] 28 U.S.C. 1920.

[8] *Supra* note 3.

[9] *Supra* note 4.

[10] *Supra* note 2.

abuse by suits which are threatened or initiated but withdrawn before the patent is declared invalid, efforts to curb abuses to date have focused on the relitigation aspect. They generally concentrate on controlling the subsequent use of a patent which has been declared invalid. It is easier to place limitations on subsequent days in court than to place limitations on the initial suits. Moreover, limitations on the first suit, or any suit before the patent is declared invalid, would tend to conflict with the policy and reason underlying the presumption of validity (35 U.S.C. 282).

There are numerous factors which underlie the willingness to accept regulation of litigation on an "invalid" patent. The patentee is usually the person who initiates the suit. Therefore he tends to make the choices of whom to sue, when to sue, and where to sue. The patentee's freedom of choice is of course limited by the number and locations of potential defendants, but in general he has far more opportunity to direct the time and place of suit, and he has the option whether to sue or not. These are powerful advantages.

Choice of Party to Sue

By picking the party to sue, the patentee may pick weaker opponents until he has obtained a few judicial declarations of validity. As discussed *infra*, prior decisions may be given considerable weight in subsequent suits. A favorable history of litigation greatly increases the bargaining power of the patentee. Furthermore, selecting the party helps select the place of suit.

Choice of Time to Sue

By selecting the best time to sue, the patentee may be able to defer risking his patent until he can present his best case for validity. Because the determination of validity involves the weighing of evidence, such evidence may be difficult to gather, may be too expensive to gather at a given time, or may not become available until some time after the patent has issued (as in the case of commercial success or impact on the market and technology, which by their very nature frequently do not become available until after the patent has been infringed). Such late-occurring evidence may make the difference between findings of validity and invalidity.[11] Moreover, the percent-

[11] For example, see Goodyear Tire & Rubber Co., Inc, v. Ray-O-Vac Co., 321 U.S. 275, 60 *USPQ* 386 (1944).

ages of patents held valid appears to vary with time and suggests that there may be recurrent validity cycles analogous to the business cycles of economists.[12] Consequently a patentee may wish to defer suits until a poor validity climate takes a turn for the better, or until the best evidence of validity becomes available.

Choice of Place of Suit

It has long been thought that different courts have different standards of patentability. Statistics certainly show a marked difference in the validity/invalidity ratios of the judicial circuits. For example, the Third Circuit Court of Appeals adjudicated 71 patents from 1953 to 1963.[13] Of these, 77.5 percent were held invalid, and another 5.6 percent were held valid but not infringed, leaving only 16.9 percent both valid and infringed. During the same period, the Fifth Circuit Court of Appeals adjudicated 82 patents. It held 40.3 percent invalid and 15.9 percent valid but not infringed. It found 43.8 percent both valid and infringed. The District of Columbia Court of Appeals adjudicated five patents, holding three invalid and the other two valid but not infringed. The remaining circuits varied from a favorable invalidity percentage of 38.1 percent in the Tenth Circuit to 76.8 percent in the Eighth Circuit. The First, Second, Third, and Eighth Circuits appear to be the most strict with regard to validity, and the Fourth, Fifth, and Tenth appear to be the most liberal.

Such statistics undoubtedly present an oversimplified and overgeneralized picture. First of all, the patent of marginal merit is more likely to be challenged than a "strong" patent in the same field. The infringer also plays the odds, and he is more likely to choose to litigate rather than license where validity is marginal and his chance of success correspondingly greater. Moreover, the validity ratio varies with the field of invention. For example, chemical patents have been invalidated 52 percent of the time, electrical patents 50.8 percent of the time, and mechanical patents 58.9 percent of the time. The mortality rates are even higher for design (69.1 percent) and plant (75.0 percent) patents. In other words, the ease with which the judge can

---

[12] See, for example, Dann's chart at p. 55 of *Dynamics of the Patent System,* (New York: Central Book Company, 1960). It appears from this study that legislative activity and Supreme Court activity can drastically alter the general validity/invalidity ratio.

[13] Data taken from Dearborn *et al., Encyclopedia of Patent Practice and Invention Management,* pp. 22-25.

understand the subject matter of the patent probably influences his decision on obviousness. Since the geographical distribution of various industries differs somewhat, the different courts tend to get cases about indigenous types of subject matter, and this may be a factor in the apparent difference in "standards of invention."

Thus the available statistics may be quite misleading. But until more detailed and sophisticated data become available, patentees will undoubtedly continue to shop for a forum which they deem desirable. Consequently, the choice of forum, or place to sue, is a prized advantage in patent litigation.

Who Picks the Forum

The choice of forum is usually with the plaintiff. All patent suits are within the original and exclusive jurisdiction of the federal district courts (28 U.S.C. 1338). The action must be brought in the district where the defendant resides, or where he has committed acts of infringement and has a regular and established place of business (28 U.S.C. 1400[b]). Thus venue is technically determined by the location and acts of the infringer, but as a practical matter, the patentee has the option of picking his defendant and thereby picking the forum. Moreover, a large corporate defendant frequently has many regular and established places of business and therefore offers a wide target to the patentee, who has a wide choice of places to sue.

To some extent, the infringer can take the choice of forum away from the patentee by bringing an action for declaratory judgement of invalidity. In this case, the choice of venue is much greater. The patentee may be sued practically anywhere he can be found and served with process (28 U.S.C. 1391). However, an actual controversy[14] must exist and this requirement cannot be easily satisfied. If the patentee has made charges of infringement, or if the acts of probable infringement are sufficently important and immediate, the defendant can probably persuade the court that an actual controversy exists.[15] But there are dangerous pitfalls in the declaratory judgement procedure.

In trying to show that the requirement for an actual controversy is met, the "infringer" frequently must present evidence which tends to show that he is indeed an infringer. Thus his assertions and evidence may establish that which he may later wish to deny or at least have the

[14] Aetna Life Ins. Co. v. Haworth, 300 U.S. 227 (1937).

[15] Moore, *Federal Practice*, Vol. 6A, §§ 57.03; 5712, and 57.20 (2nd 3d. 1966); Whinston, 43 *JPOS* 565-573 (1961); Soffen, *George Washington Law Review*, Vol. 22 (1953), p. 63.

other party prove without his help. Moreover, the patentee will certainly counterclaim for infringement, and the infringer may be provoking a suit which the patentee did not even contemplate. Thus the action has a "go for broke" flavor, and its allure has been understandably resisted for the most part. It may be useful where the infringer realizes that litigation is imminent and that his best strategy is to admit infringement and rely upon a defense of invalidity, but it does not serve to balance completely the opportunities for forum-shopping available to the plaintiff.

To a very small extent, some forum-shopping may be accomplished by either party after the action has been initiated. The doctrine of *forum non conveniens* allows the court in its discretion to decline to exercise possessed jurisdiction because the action may more appropriately be tried elsewhere.[16] Such factors as ease of access to the evidence, availability of process, location of witnesses, et cetera, may persuade the court to decline jurisdiction, but unless the balance is strongly in favor of the defendant, the plaintiff's choice of forum should rarely be disturbed.[17] Thus it is unlikely that a change of venue will be granted. It is even less likely that motions for a change of judge within the court will be granted for reasons of bias, et cetera.[18]

Therefore it is the patentee in most instances who determines the party to sue, the time to sue, and the forum. Since he has provoked the litigation and chosen the most favorable conditions for it, there is some reason for making him assume an increased risk. The increased risk is generally defined in terms of giving more or less conclusive effect to the determination on validity if the decision goes against the patentee. If the decision is in favor of the validity of the patent, there is no reason to give the determination a correspondingly conclusive effect against a stranger to the litigation.

In any event, it is frequently thought to be "evil" that a patentee can obtain an adverse decision on the validity of his patent, yet continue to use the patent as though it were valid. Thus the courts and legislature tend to start with the assumption that litigation on an "invalid"[19] patent is inherently bad. They then proceed to propose oversimplified solutions to the assumed "problem."

---

[16] Blair, "The Doctrine of Forum Non Conveniens in Anglo-American Law," *Columbia Law Review* Vol. 29 (1929), p. 1.

[17] Gulf Oil Corp. v. Gilbert, 330 U.S. 501 (1947).

[18] Firestone Tire & Rubber Co. v. General Tire Co., 140 *USPQ* 124 (Md. 1963).

[19] "Invalid" is used herein to signify a patent which has been held invalid in whole or in relevant part by a court. "Patentee" is used to mean the patentee or his successors in title, 35 U.S.C. 100 (d).

THE SCOPE OF THE MULTIPLE LITIGATION PROBLEM

It is necessary to determine how many suits are commenced after the patent has been held invalid in order to appreciate the magnitude of the relitigation problem. The most comprehensive study of patent litigation statistics to date covers the period from 1949-1958.[20] During this period, 62 suits were commenced after an earlier determination that the patent in suit was invalid. The vast majority of these were terminated without a determination of the validiy of the patent, which fact probably indicates that the patentee is more sensitive to negotiation in these cases. Only 27 patents received a decision on the merits. Nine patents had their validity redetermined, of which seven were held valid.

The conclusions which can be drawn from the Senate study must be regarded as highly tentative. The statistics included only those suits in which both the prior finding of invalidity and the filing of subsequent suits occurred during the fiscal years 1949-1958. Moreover, the study does not specify what role the "invalid" patent played in the subsequent litigation. It is one thing for an "invalid" patent to be the primary cause of action, but it is another thing for a patentee to include an invalid patent among other patents which the defendant is charged with infringing. While *in rem* invalidity proposals would foreclose the former suits, they might have little effect on the latter.

But the study makes clear two compelling facts. First, the number of patents which are relitigated after a finding of invalidity is so small that the problem seems to be *de minimis*. During the period studied, an average of 2.7 patents were relitigated annually. About 80 percent of the total patents litigated were involved in only one suit. Only about 2 percent of the litigated patents were involved in more than three suits. Only ten patents were litigated in over ten suits. None of these percentages make any distinction between patents held valid and invalid in the previous litigation.

Thus the nature of the problem can be placed in an approximately precise perspective on the basis of available data. Most patents are never litigated at all. Of those few which are litigated, the vast majority (about 80 percent) are litigated only once. An almost-negligible number (about 2.7 annually) are relitigated after they have been held invalid. And very infrequently, a patent will be litigated to

---

[20] *An Analysis of Patent Litigation Statistics,* Staff Report of the Subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary (Washington D.C.: G.P.O. 1961).

such an extent that it may be deemed an abuse. It is clear that the "problem" in even its most broadly defined aspect (i.e., relitigation of an invalid patent whether or not it is held invalid on relitigation) is at most presented in about two or three instances a year on the average. The more serious problem of multiple litigation to an inordinate extent on a patent which is always held invalid can be discounted altogether as rarely or never occurring.

The second compelling fact demonstrated by the study is that a substantial number of patents which are relitigated after they have been held invalid are held valid in the subsequent litigation. So many factors enter into the validity determination that it can serve no purpose to speculate as to why the results differ. But since the prior holding of invalidity undoubtedly is given substantial weight in the later suits, it can be expected that the patent which is held valid in spite of this handicap has more than the usual merit. In any event, the first determination on the question of validity must be regarded as wrong in view of the later decision. Thus it is apparent that strong measures which foreclose subsequent suits on an invalid patent may well result in more valid patents being sacrificed than invalid patents being justly supressed. These valid but unjustly unrecognized patents further decrease the magnitude of the relitigation problem. It is doubtful than anyone would maintain that it is "bad" to allow a patentee who has received an obviously wrong decision to take his patent to a different forum. Any problem here lies in the unreliability of the first litigation, a factor which detracts from, rather than enhances, the attractiveness of the *in rem* proposals.

In summary, the Senate study indicates that the relitigation problem is of such low magnitude that it hardly warrants either the harsh statements condemning it or the harsh proposals curtailing it. On the other hand, the magnitude of the inequities which would result from such proposals is much greater than one would expect. Both factors compel that any proposals in the nature of *in rem* invalidity be given careful scrutiny.

Collateral Factors Which Bear on the Problem

There are a number of collateral factors that bear on the problem of relitigation. These factors must be identified and considered before the problem can be appreciated in its real perspective.

The Standards of Patentability and Reliability of the Courts

The fundamental "standards of patentability" determine the validity ratio of patents. And simplified standards increase the reliability of judgements, so that results become more consistent and predictable. In turn, increased predictability encourages more out-of-court settlements and therefore decreases the amount of litigation.

Any factors which raise or lower the standards of patentability, or which clarify their application, will have both long-range and short-range effects on the amount of litigation.

The short-range effects include an immediate alteration of the validity ratio. A higher standard of patentability will of course result in a higher mortality rate for those patents issued under the lower standards. The effect on the amount of litigation cannot be easily predicted. The increased probability of a successful defense of invalidity will tend to encourage some infringers to litigate instead of negotiate. On the other hand, a patentee whose patent is marginal has a lowered probability of success. Only experience will reliably tell whether the balancing of these opposing factors will result in a net increase or decrease in the amount of litigation.

The long-range effect of higher standards might well be a significant decrease in litigation. Patents issued under the higher standards should wear well in court unless significant new art is discovered. A lower percentage of them should fail. Those which do fail will be likely to do so because of factors which postdate their allowance (such as new art), and the prospects of such patents under the new strict standards should be more predictable.

Since an important aspect of the Patent Reform Bill (Senate 1042) involves provisions to raise the general standards of patentability (e.g., by eliminating the "rule of doubt") as well as provisions designed to simplify the concepts of prior art (e.g., first-to-file concept of prior art, clarification of "publication" and "knowledge," et cetera), it would seem to be wise to defer any action on strong litigation-curtailing measures until the collateral effects of the validity-bolstering provisions can be evaluated.

The Scope of Estoppel to Be Applied

A critical problem where relitigation is concerned is the scope of the estoppel to be applied. The problem generally occurs in the context of claims which are related to the claims which have been declared

invalid, but which have not themselves been declared invalid. Too broad an estoppel may unjustly deprive the patentee of his valid property, while too narrow an estoppel will enable the patentee to evade the estoppel concept by piecemeal litigation.

Multiple Patent Coverage

Under the present law, there may be a plurality of patents which cover a given invention. The usual instance is where early patents are granted with broad generic claims, and later patents are drawn to specific improvements of the generic invention.[21] A device infringing the later patent must necessarily fall within the scope of the earlier generic patent.

Even if the idea of dominant/subordinate (generic/specific) patents is accepted where each patent has been granted on an "inventive contribution" of its own, it has recently become acceptable to issue such patent where there is only a single "inventive contribution" between them, if a terminal disclaimer is filed so that both patents expire at the same time.[22] Thus an inventor presently may obtain plural overlapping patents based on a single patentable invention. This situation raises the problem of the status of the complementary patents after one of them is found invalid. To what extent may a patent which has never been litigated be the subject of an estoppel arising out of the fact that it is an obvious variant of an invention of a patent which has been declared invalid? To what extent can an inventor evade the estoppel by the simple expedient of obtaining a plurality of patents which all cover the same or similar embodiments and bring suits on them separately?

The Patent Reform Bill would abolish the use of the terminal disclaimer as a device for getting a plurality of patents where only one patentable invention is present (Section 252 of the Bill). But this provision would not change the present practice of granting generic and improvement patents where two inventions are present. Judge Rich has suggested that the terminal disclaimer could be retained by allowing all patents interrelated by terminal disclaimer to fall togeth-

---

[21] For example, see *In re* Lemin, 332 F. 2d 839, 141 *USPQ* 814 (C.C.P.A. 1964) for an instance where a species was held patentable over a genus embracing it, and *In re* Heinle, 342 F. 2d 1001, 145 *USPQ* 131 (C.C.P.A. 1965) and *In re* Allen, 343 F. 2d 482, 145 *USPQ* 147 (C.C.P.A. 1965), for instances where patents to combinations were held patentable although a dominant element was already patented.

[22] For example, *In re* Braithwaite, 379 F. 2d 606, 154 *USPQ* 38 (C.C.P.A. 1967).

er.[23] But increasing the "stakes" in the litigation in this manner would tend to expand the scope of the validity issue during trial by bringing in the validity of patents which have no relationship to the controversy except the disclaimer.

Multiple Claims in a Single Patent

It is also common practice to place claims of varying scope in a single patent. Thus the patent may contain a fairly large number of claims all of which cover a given embodiment. To what extent will the estoppel affect claims not declared invalid in the suit? To what extent can the patentee bring suit upon a few claims at the time and prolong litigation in this manner?

Reissue Claims

To what extent does an estoppel apply to an application for a reissue or a patent granted thereon? Since it is now relatively easy to obtain reissue patents, can a patentee get a review of the court decision by applying for a reissue?

In short, it may be so difficult to establish the scope of an estoppel that it will form a new field for litigation. Then *in rem* invalidity or "estoppels" will not necessarily curtail litigation but may instead shift the litigated issues or simply add new issues to the suit.

Supreme Court Review Based on Conflicting Decisions

Another question raised by the *in rem* invalidity proposals concerns the function of conflicting decisions as a persuasive factor in the granting of certiorari by the United State Supreme Court.[24] In the past, conflicting decisions on a patent's validity has been an important factor in granting certiorari. Under the *in rem* invalidity proposals, such conflict could arise only where the patent is held valid in the first decision. If the first decision is that the patent is invalid, there is no opportunity to obtain a conflicting view. Thus the *in rem* invalidity proposals may curtail the rights of the patentee to obtain an appeal by lowering the probability of review by the Supreme Court.

---

[23] Rich, "The Proposed Patent Litigation: Some Comments," *George Washington Law Review*, Vol. 35 (1967), pp. 641, 647.

[24] Supreme Court Rule 19, § 1 (b).

WHAT THE LAW IS NOW AND WHERE IT IS GOING

PATENT LAW

The *Report* of the President's Commission states the present law as follows:

> Under present law, even though one or more claims of a patent have been held invalid in one Federal circuit, the patentee may pursue a different defendant in another circuit for infringement of of the same claims.[25]

This statement of the law is somewhat too generous. It is generally held that a suit against a different defendant may be brought even in the same circuit where the patent has been held invalid.[26] Of course, the prior decision will have greater effect as *stare decisis* (precedent) in the later suit, and a decision by the appellate court must be given great weight by a lower court,[27] but an earlier decision against the patentee even in the same circuit is not conclusive in a suit involving different defendants, and new evidence or a change in facts may persuade the court to reach a different conclusion.[28]

It is true that the prevailing rule does hold that decisions holding patents invalid in suits against other defendants do not conclusively settle the issue of validity in a suit against a different party.[29] This result is reached by application of the general legal rules of *res judicata,* particularly the rule of mutuality of estoppel. The mutuality requirement prevents a litigant from invoking the conclusive effect of

---

[25] *Report of the President's Commission on the Patent System* (Washington, D.C., Preliminary Printing, 1966), p. 44.

[26] Tatko Bros. Slate Co., Inc. v. Hannon, 270 F. 2d 571, 122 *USPQ* 585 (2d Cir. 1959); S. H. Kress v. Aghnides, 113 *USPQ* 395 (4th Cir. 1957); Aghnides v. Holden, 226 F. 2d 949, 107 *USPQ* 195 (7th Cir. 1955); Gold Seal Importers, Inc. v. Westerman-Rosenberg, Inc., 133 F. 2d 192, 56 *USPQ* 281 (2nd Cir. 1943).

[27] American Photocopy Equipment Co. v. Rovico, Inc., 257 F. Supp. 192, 150 *USPQ* 180 (N. Ill. 1966); Laitram Corp. v. King Crab, Inc., 244 F. Supp. 9, 146 *USPQ* 640 (Alaska 1965); Stoody Co. v. Carlton Metals, Inc., 25 F. Supp. 935, 39 *USPQ* 470 (S. Calif. 1938); Good Humor Corp. v. Mellow Ice Cream Corp., 36 *USPQ* 410 (E. N.Y. 1938); General Electric Co. v. Parr Electric Co., Inc., 21 F. Supp. 471, 36 *USPQ* 194 (E. N.Y. 1937).

[28] Pierce v. American Communications Co., Inc., 159 F. Supp. 943, 116 *USPQ* 508 (Mass. 1958); Tatko Bros. Slate Co., Inc. v. Hannon, 157 F. Supp. 277, 116 *USPQ* 53 (Vt. 1957).

[29] Triplett v. Lowell, 297 U.S. 638 (1936); Technograph Printed Circuits, Ltd. v. Methode Electronics, Inc., 356 F. 2d 442, 148 *USPQ* 181 (7th Cir. 1966); Abington Textile Machinery Works v. Carding Specialists (Canada) Ltd., 249 F. Supp. 823, 148 *USPQ* 33 (D.C. 1966).

a judgement unless he would have been bound if the decision had gone the other way.[30] While mutuality was virtually always required at an earlier date,[31] some recent decisions both in federal courts[32] and state courts[33] have repudiated the mutuality rule.

The traditional rule of *res judicata* requires that the prior decision be between the same parties or their privies, be based on the same cause of action, and be decided upon the same issues as are involved in the subsequent suit. It must be a final decision of a court of competent jurisdiction. Early inroads were made on the requirement that the second action be based on the same cause of action or demand. Where the cause of action in the second suit was not the same as the cause in the earlier unit, the doctrine of collateral estoppel was applied. While *res judicata* settles all issues which were decided *or could have properly been decided* in the earlier case, the narrower doctrine of collateral estoppel merely gives conclusive effect to those issues which actually were decided.[34] Where the same issue has once been decided between the parties in the suit, it is logical to bind both parties by the decision on that issue.

The requirement for mutuality arises from the requirement of *res judicata* and collateral estoppel that the parties be the same. Where one of the parties was not at all involved in an earlier suit, it would be unjust and illogical to give the decision conclusive effect against him. In fact, it would probably be a violation of "due process of law" to do so. The doctrine of mutuality is based upon the premise that if the party who was not involved in the earlier suit is not given the *burden* of an issue which was decided in favor of the party who was in the earlier suit, it would be unfair to give him the *benefit* of an issue which was decided against the common party.

Those who attack the mutuality rule focus on the requirement of identity of issues. They reason that a given party is only entitled to a day in court on a given issue. If the issue is decided against him, he

[30] Moore, *Federal Practice*, Vol. 1B (2nd ed. 1965), p. 1801.

[31] Bigelow v. Old Dominion Copper Mining and Smelting Co., 225 U.S. 111 (1912).

[32] Zdanok v. Glidden, 327 F. 2d 944 (2nd Cir. 1964); Davis v. McKinnon & Mooney, 266 F. 2d 870 (6th Cir. 1959); United States v. United Airlines, Inc., 216 F. Supp. 709 (E. Wash. 1962); United Banana Co. v. United Fruit Co., 172 F. Supp. 580 (Conn. 1959); Chapman v. Pollack, 148 F. Supp. 769 (W. Mo. 1957).

[33] Israel v. Wood Dolson Co., 1 N.Y. 2d 116, 134 N.E. 2d 97 (1956); Bernhard v. Bank of America, 19 Cal. 2d 807, 122 P. 2d 892 (1942). Decisions in New York following Israel and in California following Bernhard are tabulated at footnote 11 of Moore, *op. cit. supra*, note 30 at 1805.

[34] Cromwell v. County of Sac, 94 U.S. 351 (1876); *In re* Szwarc, 319 F. 2d 277, 138 *USPQ* 208 (C.C.P.A. 1963).

should be bound by the decision even if he seeks to raise *the same issue* in a suit against another party. Thus the question is whether the same issue which controls the litigation at hand has been previously decided unfavorably to the party against whom the earlier suit is pleaded in defense.

The primary characteristic of *res judicata* and collateral estoppel is conclusiveness. The effect of a prior decision is not related to its correctness.[35] As a general proposition, even a change in circumstances does not alter the effect of a prior decision as *res judicata*,[36] although changed circumstances may have a bearing on the effect of a decision as collateral estoppel. In general, the conclusive effect of collateral estoppel is more flexibly determined than the effect of *res judicata*. It follows that the effect of collateral estoppel where mutuality is not present will be even more flexibly applied.

In contrast, the doctrine of comity does not require that an earlier decision be given conclusive effect. It merely requires the court to give considerable weight to any earlier litigation so that the results may be as consistent as possible. The leading case in the patent field is *Triplett* v. *Lowell*.[37] There the patent in suit had been held invalid in an earlier suit as to certain claims, and the patentee brought suit against a different defendant. The defendant moved to dismiss the suit on the ground that the claims held invalid had not been disclaimed properly. The disclaimers were alleged to lack promptness and adequacy.[38] The defendant contended that if any claim of a patent was adjudged invalid, no further suit could be maintained upon it, or upon any other claims of the patent, without a disclaimer of the claims previously held invalid. The patentee could not contest again the validity of the claims held invalid and only by abandoning them by timely disclaimer could he litigate other claims.

---

[35] *In re* Prutton, 204 F. 2d 291, 97 *USPQ* 447 (C.C.P.A. 1953); Williams v. Armroyd, 7 Cranch 423, 3 l. Ed. 392 (Sup. Ct. 1813); Milliken v. Meyer, 311 U.S. 457 (1940); United States *ex rel* Larkin v. Maryland Casualty Co., 45 F. Supp. 286 (Mass. 1943).

[36] Thompson v. Washington Nat. Bank, 68 Wash. 42, 122 P. 606 (1912) (new evidence); Heikkila v. Barber, 216 F. 2d 407 (9th Cir. 1954), cert. den. 349 U.S. 927 (1955) (new statute); Chicot County Drainage Dist. v. Baxter State Bank, 308 U.S. 371 (1940) (decree based on statute later held unconstitutional).

[37] 297 U.S. 638, 29 *USPQ* 1 (1936).

[38] Revised Statutes § 4922 provided that a patentee who had claimed more than he had invented could maintain a suit for "any part" of the patent "which was bona fide his own" if it was a material and substantial part of the thing patented, and definitely distinguishable from the parts claimed without right, with the proviso that "no patentee shall be entitled to the the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer."

Justice Stone, speaking for a unanimous Court, held that

> Neither reason nor authority supports the contention that an adjudication adverse to any or all the claims of a patent precludes another suit upon the same claims against a different defendant. While the earlier decision may by comity be given great weight in a later litigation and thus persuade the court to render a like decree, it is not *res adjudicata* and may not be pleaded as a defense.

The Court pointed out that it had several times held valid claims of a patent which had been held invalid by a circuit court of appeals in an earlier suit brought by the same plaintiff against another defendant.[39] The Court held that the court whose jurisdiction is invoked by such a suit must determine for itself the validity of the claims notwithstanding a prior adjudication of invalidity of some of them, unless the issues had become *res judicata* because both suits were between the same parties or their privies. The application of the disclaimer statute need not be considered unless the court in the subsequent suit also found the claims invalid.

The doctrine of comity has been given different amounts of weight in the patent cases. Decisions in the same circuit, which are entitled to weight for reasons of both *stare decisis* and comity, are usually followed in subsequent cases where the issues are substantially the same.[40] Decisions in other circuits are given varying weight. Where no new evidence is presented, and the issues are about the same a those decided in the earlier suit, great weight may be given to the earlier litigation.[41] But new evidence, new issues, or disagreement with the rule of law of the earlier case may cause the court to discount the earlier decision.

Thus the doctrine of comity allows the court to evaluate the earlier decision and use it for what it is worth. It allows the court to narrow the issues of fact to those not decided in the prior litigation, and the prior litigation is not followed so mechanically that it destroys the

---

[39] Expanded Metal Co. v. Bradford, 214 U.S. 366 (1909); Diamond Rubber Co. v. Consolidated Rubber Tire Co., 220 U.S. 428 (1910); Abercrombie & Fitch v. Baldwin, 245 U.S. 198 (1916).

[40] Brian Jackson Associates, Inc. v. San Manuel Copper Corp., 259 F. Supp. 793, 151 *USPQ* 5 (Ariz. 1966); American Photocopy Equipment Co. v. Rovico, Inc., 257 F. Supp. 192, 150 *USPQ* 180 (N. Ill. 1966); Laitram Corp. v. King Crab, Inc., *supra* note 24; Aghnides v. Holden, *supra* note 23; Tatko Bros. Slate Co., Inc. v. Hannon *supra* note 26; Good Humor Corp. v. Mellow Ice Cream Corp., *supra* note 27.

[41] Plax Corp. v. Flexel Container Co., Inc., 154 F. Supp. 704, 114 *USPQ* 69 (W. Mo. 1957); Cold Metal Products Co. v. Crucible Steel Co., 147 F. Supp. 25, 112 *USPQ* 19 (N.J. 1956); Aghnides v. S. H. Kress & Co., 140 F. Supp. 582, 110 *USPQ* 234 (M.N.C. 1956).

flexibility of the court to consider new issues, new evidence, or even the correctness of the earlier decision. As such, it contrasts sharply with the doctrine of *res judicata*, where conclusiveness may be a drawback because it precludes the evaluation of evidence not present in the prior case.

Some halting inroads have been made on the doctrine of mutuality of estoppel in the patent field, but the courts have consistently refused to apply the doctrines of *res judicata* or collateral estoppel to suits against new parties. In the *Nickerson*[42] case, the patent sued on had been previously held invalid by the Sixth Circuit[43] in a detailed, carefully considered opinion. The defendant moved for summary judgement of invalidity on the basis of the earlier suit. The court discussed the *Triplett* case and modern decisions disregarding or modifying the mutuality rule, and stated that "the mutuality rule thus runs counter to the salutary public policy that there be a definite end to litigation when a party has had a full, free, and untrammeled opportunity to present all facts pertinent to a controversy and to be heard thereon." The court determined that there were no circumstances in the case at hand that would make it unfair to hold that the plaintiff was estopped by the earlier decision to relitigate the validity of his patent. The court pointed to the detailed consideration given by the court in the previous action. It further pointed out that the patentee was not alleging that he had any additional evidence to present, but that he was merely contending that the earlier decision was wrong. (Given this reading of the facts, summary judgement would be proper in any event because only an issue of law was present.)

The court went on to note that there might be instances where it might be unfair to hold a patentee to be bound by a prior adverse decision on validity when he sues a different defendant. For example, where a patent has been sued on many times and been sustained in the series of suits, it might be unjust to give conclusive effect to a single suit holding the patent invalid. There it might be suspected that the last decision should not be blindly followed. The court indicated that the estoppel rule would not apply in such a case.

While it might be thought that the *Nickerson* case evidences a trend toward the modification of the mutuality rule in patent law to parallel a trend in the general law, the case is of dubious value as precedent.

[42] Nickerson v. Pep Boys—Manny, Moe & Jack, 247 F. Supp. 221, 148 *USPQ* 125 (Del. 1965).

[43] Nickerson v. Barefoot Sole Co., Inc., 311 F. 2d 858, 136 *USPQ* 96 (6th Cir. 1962), cert. den. 375 U.S. 815.

While the case speaks of the mutuality rule, the flexibility of the estoppel applied characterizes it as essentially an application of comity. Having determined that no new evidence was to be presented, the court merely had to decide whether or not to follow the prior decision. Cases prior to the *Nickerson* case which had held that it was improper to grant a motion for summary judgement on the basis of a prior determination of invalidity against a different defendant had nevertheless recognized that it would be proper to grant such a motion if it appeared that the evidence to be submitted at the trial did not differ essentially from that presented in the earlier case.[44] In *Nickerson,* the patentee, who represented himself in the suit, appears merely to have failed to establish the presence of a disputed issue of fact.

In a later case,[45] the *Nickerson* court, with a different judge presiding, stated that "The general rule is that a patentee who has lost on the issue of validity in one District against one defendant may relitigate the validity issue against another defendant unimpeded by the previous result . . . (T) here are indications that the rule may be crumbling" (citing *Nickerson*) . During this writing, the Third Circuit has indirectly considered and reversed the *Nickerson* decision.[46] Another defendant was sued on the *Nickerson* patent, and the court granted a motion for summary judgement. The *Nickerson* opinion was employed in the record of the case for reasons of appeal. The appellate court found that Nickerson offered to present additional evidence, and that "even though we may agree that a strict requirement of mutuality should not be continued in the field of patent litigation, two considerations prompt us to reverse the lower court in this particular case." The first consideration was that the court could not determine from the record whether the issues were the same as those in the earlier case. The other consideration was that litigation on the subject is currently being considered by Congress. But the court indicated "our general approval of the opinion below . . . we do more than endorse careful and enlightened decisions by the District Courts in our circuit, we also affirm the general position of this court in *Bruszewski* v. *United States* (181 F. 2d 419 [3rd Cir. 1950]) . . . that a strict rule of mutuality no longer has a proper place in the doctrine of *res judicata.*"

Thus there is some indication that the courts are tending to give substantial weight to an earlier decision on validity, whether it is

---

[44] Aghnides v. Holden, 226 F. 2d 949, 107 *USPQ* 195 (7th Cir. 1955).
[45] General Tire & Rubber Co. v. Isocyanate Products, 155 *USPQ* 339 (Del. 1967).
[46] Nickerson v. Kutschera, 157 *USPQ* 225 (3rd Cir. 1968).

justified under doctrines of estoppel or comity.[47] Thus the courts seem to be evolving rules which are somewhat less stringent than collateral estoppel, but which give the earlier decision considerable weight in the later litigation if the evidence and issues are substantially the same as those presented in the earlier case. There seems to be a concomitant increase in the number of summary judgements of invalidity given when a patent is relitigated after an earlier holding of invalidity.

Mutuality Outside the Patent Law

In general, the traditional concepts of *res judicata* and collateral estoppel still represent the prevailing law. There has been some tendency of late to relax or repudiate the mutuality rule and apply a limited form of collateral estoppel where mutuality is not present.

First of all, a number of "exceptions" to the mutuality rule have been fashioned. A secret participant in litigation, although he cannot invoke the conclusive force of a judgement adverse to the opposing party, is bound by a judgement favorable to the opposing party.[48] In general, the exceptions to the mutuality rule involve derivative or secondary liability, such as master/servant, principal/agent, surety/principal debtor, et cetera. These are really instances where a sort of privity exists in that one party is vicariously responsible for the other. Thus the exceptions to the rule of mutuality are quite limited.

Then there are a smaller number of jurisdictions which have repudiated the mutuality rule as a strict requirement for conclusiveness. These courts give full effect to the findings in an earlier litigation involving one of the parties.[49]

There are a number of instances where an earlier adjudication may

---

[47] Leach v. Rockwood & Co., 273 F. Supp. 779, 154 *USPQ* 356 (W. Wisc. 1967); Brian Jackson Associates, Inc. v. San Manuel Copper Corp., *supra* note 37; Technograph Printed Circuits, Ltd. v. Methode Electronics, Inc., *supra* note 29; Abington v. Carding, *supra* note 29; La Maur, Inc. v. DeMert & Dougherty, Inc., 148 *USPQ* 59 (N. Ill. 1966); Laitram v. King Crab, Inc., *supra* note 24; Spray-Bilt, Inc. v. Ingersoll-Rand World Trade, Ltd., 350 F. 2d 99, 146 *USPQ* 686 (5th Cir. 1965); U.S. Pipe & Foundry Co. v. Woodward Iron Co., 246 F. Supp. 424, 147 *USPQ* 479 (W. Va. 1965); Bros. Inc. v. W. E. Grace Mfg. Co. 351 F. 2d 208, 147 *USPQ* 1 (5th Cir. 1965).

[48] Moore, *op. cit. supra* note 30, § 0.412[2].

[49] Moore *id.* at 1805-1808; Currie, "Mutuality of Collateral Estoppel: Limits of the Bernhard Doctrine," *Stanford Law Review,* Vol. 9 (1957), p. 281; Currie, "Civil Procedures: The Tempest Brews," *California Law Review,* Vol. 53 (1965), p. 25; Schwartz, "*Res Judicata* as applied in Patent Office Prosecution & Patent Enforcement Litigation," 49 *JPOS* 637, 647-652 (1967).

be given effect in a subsequent suit. A final criminal judgement may be given collateral estoppel effect in a subsequent civil suit. Since the standards of proof are different in the two types of litigation, it is prejudicial error to admit evidence of an earlier judgement of civil liability in a criminal action.[50] The general view is that since a defendant has greater safeguards in criminal than civil litigation, and the burden of proof in the former is greater, that a judgement of conviction may properly be given collateral estoppel effect in a civil suit involving the same issues and the same parties. Where the rule of mutuality is not satisfied, the general rule is that a criminal conviction is inadmissible in a civil action. An increasing number of courts have adopted a rule of admissibility, giving the earler conviction either *prima facie* or conclusive effect. An exception to the general rule exists where the defendant attempts to profit from his crime, as where one convicted of homicide attempts to collect insurance on his victim.[51]

But the authorities are overwhelmingly in favor of the doctrine of mutuality. The policies which underlie doctrines of judicial finality are protection of private litigants against harassment by repeated lawsuits, and the public interest in minimizing litigation.[52] Abolishment of mutuality is not supported by the first policy. The defendant in the later action was not a party to the earlier litigation. Otherwise, mutuality is satisfied. In this case, the defendant is asking not for protection from repeated litigation, but for protection from any litigation at all.

The second policy, the public interest in minimizing litigation, is qualified by the fundamental provision that one who is to be bound by a judgement must have had his "day in court," and more precisely, a day in court on the exact issues at hand. It would be unrealistic to assume that a single day in court insures a proper result in all cases. As noted in the *Triplett* case, patents frequently have been found valid by the Supreme Court after they have been held invalid in an earlier case. As the Senate study reveals, a relatively high proportion of patents which were first held invalid are later held valid. A value judgement that it is in the public interest to sacrifice these patents for the sake of some small decrease in litigation is difficult to defend.

Moreover, it is far from established fact that abandonment of the mutuality rule would decrease litigation. Some writers have noted that

---

[50] Moore, *op cit, supra* note 30, at 2702.
[51] Metropolitan Life Ins. Co. v. McDavid, 39 F. Supp. 228 (E. Mich. 1941).
[52] Moore, *op cit. supra* note 30 at 1809.

such change might instead increase litigation, and increase it unjustifiably.[53] The majority of lower court decisions are not appealed for a large number of reasons, many of which are unrelated to the merits of the decision itself. The defendant may have ceased infringement, become bankrupt, or be otherwise judgement proof. The patentee may not be able to afford an appeal (although he cannot afford *not* to appeal under *in rem* invalidity proposals). The decision may be that the patent is both invalid and not infringed, and the patentee may feel that he has a good chance to get the judgement of invalidity reversed but a poor chance of getting the non-infringement decision reversed. The winning defendant may be willing to settle rather than risk further litigation.

In short, the consequences of the patentee's adverse decision now are known to affect only the involved parties. Under such circumstances, the patentee may find it unprofitable to pursue an appeal. But if he stands to lose the patent property in totality, and the value of the property is incapable of accurate evaluation at the time, the patentee has no choice but to litigate the decision with all the resources at his disposal. The net result may well be an increase in litigation. These reasons have led the overwhelming majority of courts, both within and without the patent field, to adhere to the doctrine of mutuality.

MEANS PRESENTLY AVAILABLE TO PROTECT AGAINST ABUSE

It must be recognized that all patent suits are conducted within the federal court system, and that these suits are conducted under the Federal Rules of Civil Procedure. These Rules have been designed for the specific purpose of insuring swift, effective, and just disposition of cases *on their merits* without undue regard to the technicalities so dear to an earlier era.[54] In short, the system is set up so that litigants have easy access to the courts and can expect a swift decision on the merits of their case through devices such as the following:

(1) The Rules permit the judge to conduct a pretrial confer-

---

[53] von Moschzisker, *"Res Judicata," Yale Law Journal*, Vol. 38 (1929), p. 299; Comment, *Oregon Law Review*, Vol. 23 (1944), p. 273; Note, *Harvard Law Review*, Vol. 54 (1941), p. 889; Moore, *op cit. supra* note 30, § 0.412[1].

[54] James, Civil Procedure 20-21.

ence.[55] This conference may be used to narrow and define the issues, provide for adequate notice or amendments to the pleadings, or may be used to isolate issues for reference to a master.[56]

(2) The Rules also provide for judgements on the pleadings[57] and summary judgements[58] in proper cases. Moreover, a motion for judgement on the pleadings may "speak" and thereby be transformed in effect into a motion for summary judgement.[59]

(3) The court has considerable discretion in the scheduling of trial. It can order separate trials of any separate issue or number of issues,[60] or it can order that common issues be consolidated.[61]

(4) The court also has power to refer issues to a master for an expert determination thereof.[62]

(5) A district court has recently converted a number of separate actions into a class action under Rule 23, where the litigation was a multidistrict series of actions with more than 70 actions being filed in 19 courts. There were 240 alleged infringers.[63] Thus all of the defendants would be able to contribute to a common defense, easing the burden on each.

These procedural tools, taken with the recent rise in the status of comity, would appear to give the courts an arsenal adequate to prevent abuse of a patent. For example, where a patent has been previously litigated, the judge may conduct a pretrial conference to determine whether the issues are such that comity requires him to limit the upcoming trial to a hearing on the patentee's allegations of error in the previous litigation, or to new evidence adduced by the patentee. He may order a separate trial on the issue of validity if the prior decision appears to indicate accurately the outcome in the case at hand. He may refer the case to a master for determination of difficult issues. And if it appears that the suit is controlled by the prior decision, he may issue a summary judgement as in the *Nickerson* case.

---

[55] Fed. R. Civ. P. 16.
[56] James, *op. cit. supra* note 54 at 222-228.
[57] Fed. R. Civ. P. 12.
[58] *id.* P. 56.
[59] *id.* P. 12 (c).
[60] *id.* P. 42 (b).
[61] *id.* P. 42 (a).
[62] *id.* P. 53.
[63] Technograph Printed Circuits, Ltd. v. Methode, Inc., 157 *USPQ* 313 (N. Ill. 1968).

LEGISLATIVE SOLUTIONS WHICH HAVE BEEN PROPOSED

The Present Patent Act

The present statute contains only one provision bearing directly on the problem: 35 U. S. C. 288 provides that "The patentee shall recover no costs unless a disclaimer of the invalid claim has been entered at the Patent Office before the commencement of the suit."[64] Apart from this provision, the presence of an invalid claim in a patent, with or without a disclaimer, does not render the remaining claims invalid,[65] or prevent the patentee from bringing suit on any valid claim.[66]

As previously noted, court costs are frequently quite high in litigation. Since the present statute requires that a claim previously held invalid must be disclaimed before the commencement of the suit or costs cannot be recovered even if the patentee recovers on the basis of other valid claims, the present statute brings a fair amount of pressure to bear in those instances where the patent has been invalidated only in part, and there is considerable deterrent to relitigation arising from that provision.[67] 35 U. S. C. 285 has an indirect bearing on the problem. It permits the court in an exceptional case to award reasonable attorney's fees to the prevailing party. Thus the patentee who sues for the purpose of harassment runs the risk of not only being out court costs and his own litigation expenses, but also attorney's fees for the other party. Thus the present statute contains provisions which make patent abuse a risky business, but which allow the patentee a reasonable opportunity to relitigate.

Previous Patent Statutes

Section 3 of the Patent Act of 1793[68] and Section 6 of the Patent Act of 1836[69] required an accurate description of the invention in the

[64] See Also 28 U.S.C. 1928.

[65] 35 U.S.C. 253.

[66] 35 U.S.C. 288.

[67] The present statute substantially codifies the rule followed in O'Reilly v. Morse, 15 How (56 U.S.) 62 (1853); Seymour v. McCormick, 19 How (60 U.S.) 96 (1856); Silsby v. Foote, 20 How (61 U.S.) 378 (1857); Yale Lock Manufacturing Co. v. Sargent, 117 U.S. 536 (1885); Smith v. Nichols, 21 Wall (88 U.S.) 112 (1874), and Sessions v. Romadka, 145 U.S. 29 (1891).

[68] 1 Stat. 318.

[69] 5 Stat. 117.

patent application. Section 6 of the 1793 Act and Section 15 of the 1836 Act allowed a defendant to prove that the specification "contains more than is necessary to produce the desired effect . . . or that the thing thus secured by the patent was not originally discovered by the patentee. . . ."[70] The Act of 1832 provided that a patent invalid for lack of compliance with Section 3 of the 1793 Act might be surrendered and a new patent complying with Section 3 issued.[71] Section 13 of the Act of 1836 similarly authorized a new patent having a corrected description to issue.

Section 7 of the Act of 1837[72] first permitted the patentee to file a disclaimer of the invalid portion of the patent and thereby preserve the valid portion. This provision was carried over into R. S. 4917. R. S. 4922 provided that a patentee could maintain a suit for any part of the patent which was bona fide his own "if it is a material and substantial part of the thing patented, and definitely distinguishible from the parts claimed without right, notwithstanding the specifications may embrace more than that of which the patentee was the first inventor or discoverer," provided that "no patentee shall be entitled to the benefits of this section if he has unreasonably neglected or delayed to enter a disclaimer."

The Supreme Court early held that these sections required that a patentee who had some claims held invalid had to either appeal from the decision or promptly file a disclaimer to save the life of the patent.[73] But the *Triplett* case established that the want of disclaimer after an earlier adverse decision could not be raised as a defense at the outset of the subsequent suit. The second suit must be heard, and an independent determination of validity made. If the court found the claims valid, the question of disclaimer was not reached. If the court found the claims invalid, then it had to consider whether the want of a disclaimer or delay in filing a disclaimer was unreasonable and thus invalidated the entire patent.[74]

All of these statutes obviously had a deterrent effect on the relitigation of a patent which had been declared invalid. In fact, the trend to date has been toward mitigation of the 1793 statute, which provided that the entire patent was destroyed if any claim were held invalid.[75] The disclaimer was designed to save the valid portions of the patent.

---

[70] Triplett v. Lowell, 297 U. S. 638, 29 *USPQ* 1 (1937), n. 1.
[71] 4 Stat. 551.
[72] 5 Stat. 191.
[73] Ensten v. Simon Ascher & Co., Inc., 282 U.S. 445, 8 *USPQ* 35 (1930).
[74] Maytag Co. v. Hurley Machine Co., 307 U.S. 243, 41 *USPQ* 556 (1938).
[75] Triplett v. Lowell, *supra* note 65 at 29 *USPQ* 3.

The 1952 Act[76] removed the requirement that a patentee choose whether to disclaim claims held invalid or run the risk of forfeiting his entire patent in the event that it was held invalid a second time. As above noted, this statute merely makes the patentee run the risk of failing to recover costs if he fails to disclaim invalid claims.

Thus the pattern of past legislation indicates legislative recognition that the patentee should not be forced to gamble his entire property on one suit, and that the best public policy allows him to attempt to vindicate his patent so long as he avoids *res judicata* and collateral estoppel by selecting a different defendant. Such suggests that prior to 1952, "harassment" or "strike suits" by the patentees of invalid patents was not regarded as a pressing public problem, and that experience had shown that the "all or nothing" attempts to curtail litigation during the infancy of our system had proven to be overly harsh and unjust.

Current Recommodations or Proposals

President's Commission on the Patent System
Recommendation XXIII states that:

> A final federal judicial determination declaring a patent claim invalid shall be *in rem,* and the cancellation of such claim shall be indicated on all patent copies subsequently distributed by the Patent Office.[77]

This Recommendation, with its supporting statements, covers only part of one page of the *Report.* The first paragraph of the supporting statements points out that a patentee may presently sue an infringer on a patent claim which has previously been held invalid. The second paragraph points out that this allows one person to have a defense to a patent, whereas his competitor may be required to pay royalties or refrain from infringing. This merely states the usual effect of the doctrines of judicial finality in our judicial system. An insurance company may be successful in defending some suits arising out of an accident, while a competing company may be less successful. Because of divergent results when two people separately bring suits arising out of the same incident, a defendant may be negligent toward one defendant, and not negligent toward the other, even though the facts on which the judgements are reached are completely identical.

---

[76] See 35 U.S.C. 253 and 288.
[77] Recommendation XXIII, Commission *Report supra* note 25.

A piece of real or personal property may have one value against the tax collector because of a tax suit, while it may have a completely different value declared in an adjudication against one who has converted it or trespassed against it. Of two criminals who jointly commit a crime, separate trials may result in opposite decisions on guilt on identical issues. In short, courts or juries not only do not always reach correct decisions, but they do not necessarily arrive at consistent decisions. It is not necessarily worse to be inconsistent than to adhere to a wrong decision.

The Commission also points out that possession of a patent, even though previously held invalid, "serves as a potential threat to persons unwilling or unable to defend a suit on the patent." While this is true, our entire judicial system is designed so that everyone has *access* to the court without regard to the merits of his case. Such access is about all that a patent which is obviously devoid of merit can give, because the system is designed so that a suit which is wholly without merit can be given short shrift. There is simply no place in a society where the legal system is designed to provide maximum access to the courts for the person who is "unwilling" or "unable" to defend against litigation. Each of us is *potentially threatened* by suits at every moment. Even without a patent, as well as with an invalid patent, a plaintiff bent on harassment of someone through spurious lawsuits can achieve some degree of success. Suits can be brought under theories of unfair competition, antitrust, breach of implied contract, tort, or countless other avenues into which a plantiff bent on abuse of the legal system can venture.

In short, merit is not a requisite for either threatening to sue or bringing suit. Therefore, our federal judicial system protects individuals from "strike suits" not by denying access to the courts, but by attempting to come to a just decision on the *merits* of the case in the most direct and expeditious manner,[78] and by imposing some penalties (such as court costs) routinely on all losers, and by imposing additional penalties (such as attorney's fees) where abuse warrants additional penalities. In extreme cases, abuse of legal processes for purposes of harassment itself forms a cause of action in tort against the abuser. Those who argue that an invalid patent is a "license to sue" tend to overlook the fact that no license is needed in our legal system. While the presence of a patent might lend additional color to such a suit, the additional color added by an invalid patent should not amount to much.

---

[78] *Supra* note 54.

The third paragraph of the Commission's remarks indicates that a claim, once held invalid, would be treated as cancelled from the patent. The *Report* states that no one could thereafter be required to pay royalty on a previously established license or judgement, but this conclusion certainly would not follow from the text of the Recommendation itself.[79] The *Report* correctly states that the proposal would preclude a subsequent suit on the patent claims previously held invalid. Such would seem to follow from the fact that the claims are treated as *cancelled.*

But the Recommendation does not at all make clear what the status of the prior judgement would be in the prosecution of a reissue application resulting from the invalid patent. If the claim is treated as cancelled, then it should be regarded as not a part of the patent. If the generic claims were so treated, the patentee may not be able to get any protection beyond his specific claims because of the time limitations on applying for a broadened reissue. If the invalid claim were treated as still being in the patent, although unenforcable, they might at least enable the patentee to obtain protection by *narrowing* the invalid claim where the time limitation prevents him from broadening a specific claim. This latter alternative would seem to be fairer to the patentee.

The fourth paragraph of the *Report* states the premises which apparently underlie the Recommendation.

> A patentee, having been afforded the opportunity to exhaust his remedy of appeal from a holding of invalidity, has had his "day in court" and should not be allowed to harass others on the basis of an invalid claim. There are few, if any, logical grounds for permitting him to clutter crowded court dockets and to subject others to costly litigation.

These statements are extremely overstated (or else just wrong), and they reflect an extremely superficial consideration of the problem. The "remedy of appeal" varies considerably and may be nonexistent in some cases. If the patent has been declared invalid on a full and considered trial by the district court, has been fully and carefully considered by the appellate court, and perhaps even received the attention of the Supreme Court, the "remedy of appeal" presents one

[79] Nothing in the terms of the Recommendation either abrogates the effect of *res judicata* on an earlier infringer, or provides a defense to collection of a final judgment previously rendered. Nor would the Recommendation necessarily provide a defense to a licensee in a suit for royalties. In Jungerson v. Kaysen, 95 *USPQ* 162 (Pa. C.P. No. 2 1952), the defendant was required to pay royalties even though the U.S. Supreme Court had held the patent invalid in Jungerson v. Ostby, 335 U.S. 560, 80 *USPQ* 32 (1949).

facet. A decision of this type should indeed be accorded a high degree of finality. But there is no "right of appeal" to the Supreme Court in the usual patent case, and past performance indicates that the issue of patent validity will occupy so little of the Court's attention that certiorari even at the present time can be discounted as an appellate remedy.[80] Under the recommended system, a patent could receive conflicting decisions on validity only where the holding of invalidity follows a holding of validity,[81] and thus the probability of appeal to the Supreme Court would be still lower.[82]

Moreover, there are a number of cases where the patent is held valid by the lower court, but it is held invalid on appeal. In such cases, there is no "remedy of appeal" as of right at all. As a practical matter, the patentee can do nothing but request that the same court reconsider its judgement. Such is not an appeal at all, because the essence of an appeal is review of an alleged error by someone other than the person who is accused of committing the error, and who therefore may be interested in justifying his decision.

Moreover, findings of fact by a lower court cannot be set aside on review unless clearly erroneous (Fed. R. Civ. P. 52 [a]). And the courts have long differed as to the extent to which patentability is a question of fact, a question of law, or a mixed question of fact and law.[83] Therefore the extent of review on appeal varies with the particular forum involved. Appellate courts may even hold patents invalid on points which receive little or no attention below. Since they also take "judicial notice" of facts to different degrees, there may be little similarity between the case on appeal and the case below. The Second Circuit has gone to the extreme of holding a patent invalid over a judicially noticed reference patent which was never formally

---

[80] The Court in 1965 focussed its attention on the patentability of inventions after a lapse of 15 years since their last expression on patent validity (A. & P. Tea Co. v. Supermarket Corp., 340 U.S. 147 [1950]). See Graham v. John Deere Co., 383 U.S. 1 (1965).

[81] Such conflicting decisions are a frequent reason for granting certiorari. See Supreme Court Rule 19, Section 1 (b). See also Graham v. John Deere Co., *supra* note 80.

[82] Moreover "(T)he Supreme Court is not, and never has been, primarily concerned with the correction of errors in lower court decisions. . . . To remain effective, the Supreme Court must continue to decide only those cases which present questions whose resolution will have immediate importance far beyond the particular facts and parties involved." Address of Chief Justice Vinson before the A.B.A., September 7, 1949, 69 S. Ct. v, vi.

[83] See Jessup, "Defining the Undefinable—Section 103," *Proceedings Seventh Annual Conference on the Patent Law,* (February 21-23, 1963), John Marshall Law School, Chicago, Lawyer's Institute.

entered in evidence and was not even considered by the court below.[84] Bearing in mind that a party has no right to introduce new evidence on appeal, it is clear that a patentee in this situation has neither had a "right of appeal" or even a meaningful "day in court."

Since the review is essentially limited to matters of law, the only way that the patentee can get a review of any plausible finding of fact (as opposed to those clearly erroneous) is by bringing a new suit against a different defendant.

Thus the *Report* clearly errs in using the concepts of "remedy of appeal" and "day in court" as though these concepts had fixed meaning, or would insure fairness in every case. These points, which appear to be the only strong points advanced by the Commission, define protections which are highly variable and which may turn out to be completely illusory.

The *Report's* conclusion that a patentee "should not be allowed to harass others on the basis of an invalid claim" also overstates the issue. The fact that a claim is held invalid does not necessarily etablish that the invention is so devoid of merit that a second suit should be characterized as "harassment" rather than a good faith effort to obtain a second opinion on a close question. No one has yet suggested that the public be prohibited from "harassing" the medical profession by seeking a second (or more) confirmatory opinion before submitting to an operation. First of all, the present law provides only a single suit against a given defendant. Such single suit has never been considered "harassment" in the sense in which that concept has been used in the theory of judicial finality. Harrasment has always been defined as multiple litigation on a single cause of action against the same parties or their privies. Such harassment is curtailed by the traditional doctrines of judicial finality.

The *Report's* context uses the expression "invalid" as meaning without merit. Patents which have been tagged "invalid" frequently have considerable merit, as demonstrated by the fact that they are subsequently held valid by the courts, including the Supreme Court, as noted in the *Triplett* case.[85]

The *Report's* conclusion that there are "few, if any, logical grounds for permitting him to clutter crowded court dockets and to subject others to costly litigation" simply ignores the fact that there are sufficiently compelling reasons for retaining the mutuality rule to

[84] Feathercombs, Inc. v. Solo Products Corp., 306 F. 2d 251, 134 *USPQ* 209 (2nd Cir. 1962).

[85] See Staff Report, *supra* note 20, at Table 16, and see the cases cited at note 39.

convince the vast majority of courts, scholars, and writers who have thoughtfully considered the question to conclude that the rule should be retained. Some of these reasons have been discussed herein. The number of relitigations is so small that they can hardly be considered as a major factor in cluttering court dockets. And the potentiality of these patents for subjecting people to costly litigation is negligible compared to the extent to which people have been subjected to "potential litigation" by the 3.5 million patents issued to date. Many of these, though never litigated, are probably far more devoid of merit than those which claim inventions having sufficient merit to motivate an infringer to infringe and to motivate the patentee to bring suit on the patent. The litigated patents probably have at least sufficient merit to make them both worth infringing and worth defending. And the risk of relitigation is so small that it can hardly be located in the vast risk of litigation which we have willingly assumed as a part of the price of our patent system.

To sum up, the Recommendation remedy is that a patent claim be cancelled automatically when it is declared invalid by a final decision of a federal court. Thus it represents the ultimate degree of finality. It is analogous to the remedy in interference stated in 35 U. S. C. 135 (a), which provides that an interference decision adverse to the patentee shall constitute cancellation of the claims involved. But in the interference situation, any lack of finality there must necessarily prejudice the right of the winning party to the interference, whereas a lack of finality as to validity does not substantially prejudice the winning party in the litigation, who is protected by the doctrines of *res judicata* and collateral estoppel. While the cancellation provision might well be justified in the case of interferences, the Commission has fallen far short of establishing a convincing case for cancellation in the case of invalidity.

The Patent Reform Bill

The Patent Reform Bill[86] differs from other pending bills in that it attempts to incorporate the *in rem* invalidity recommendation.[87] It provides that a final adjudication limiting the scope of the claim or holding it invalid *"shall* constitute an *estoppel against the patentee,* and those in *privity* with him, in *any* subsequent Federal actions, and

[86] H.R. 5924 and S. 1042. This bill was introduced into the Senate by Senator McClellan.

[87] S. 1042 Section 294. See also H.R. 11447.

may constitute an estoppel *in such other Federal actions* as the latter court may determine."[88] (Emphasis added.) This proposal appears to differ from the Recommendation in that it treats both limitations on the scope of the claim and declarations of invalidity together. Since a limitation on the scope of the claim (short of zero) cannot be accomplished by cancelling the claim, the statute speaks instead of an "estoppel." Such choice of language is unfortunate because "estoppel" has been used in various ways in the law. Collateral estoppel is a relatively harsh doctrine of finality. But equitable estoppel is a more flexible doctrine based on fairness, not finality. Moreover, equitable estoppel is primarily applied where a party has led another to rely upon a given set of circumstances. While an infringer might well rely upon a holding of invalidity after it has been made, he could hardly have reasonably relied on such holding where the infringing acts preceded the holding. Moreover, estoppels are unfavorably viewed and will not be applied to achieve an unjust result.

But an estoppel differs from cancellation in that estoppel merely provides an affirmative defense which must be raised during the action.[89] Furthermore, it is a defense that can be waived by failure to present it in a timely manner.[90] In contrast to cancellation, which negates the cause of action at the outset, therefore cannot be waived, and goes to *preventing* the suit, the affirmative defense of estoppel merely raises another issue to be tried. While it may serve to cut short the litigation by giving another ground for judgement on the pleadings or summary judgement, it does not directly cut down on the number of cases which "clutter crowded court dockets."

The proposed statute also departs from the *in rem* concept by making the estoppel run against the *patentee* and his privies, instead of directly affecting the patent itself. The statute therefore invites litigation on the issue of privity, which has proven a fertile field for litigation both within and without the patent field.[91] Since there are two theories of privity, "privity of contract" and "privity of estate," it is not clear who will be bound by the estoppel. Moreover, the statute provides for mandatory estoppel "in any subsequent Federal actions," and *may* constitute an estoppel "in such other Federal actions" as the latter court may determine. Thus the statute seems to provide both a

---

[88] Section 294 (a).

[89] Fed. R. Civ. P. 8 (c).

[90] Fed. R. Civ. P. 12 (b).

[91] See Moore, *op. cit. supra* note 30, at 1251-2051 for a general discussion of privity problems. In the patent field, the problem of privity between manufacturer and customer is frequently litigated.

mandatory and discretionary estoppel, with the mandatory estoppel applying to *subsequent* litigation, and the estoppel applying in the court's discretion to suits commenced before the declaration of invalidity. In terms of equitable estoppel and reliance, these provisions make sense, but in terms of carrying out the Recommendation, the proposed statute is more flexible and less harsh. Moreover, it provides a loophole by which the patentee may bring a large number of suits at the same time, rather than bringing them in sequence. To some extent, patent suits might become class actions under the new system.

Section 294(b) allows the court in its discretion to order cancellation of the invalid claim from the patent. Thus the statute provides for both a mandatory "estoppel" and an optional "cancellation." Therefore the statute is somewhat more flexible than the Recommendation, but it contains a great deal of potential for litigation, including the logical requirement that the "issue of validity or scope of a patent is properly before the court," which invites litigation as to whether the holdings in a prior case were dicta or were necessary to the decision. There are also a number of technical requirements for notice and intervention by the patentee (Section 294 [c]). To the extent that the statute provides for something short of *in rem* adjudication, it will have less value than the Recommendation in reducing litigation, but it will be less harsh and more likely to achieve equitable results. But since it contains a number of provisions which require interpretation, and it raises uncertainty about the effect of a decision on future or concurrent litigation, it might do more to increase litigation than to curtail it, particularly in view of the very small number of cases which are presently involved in relitigation.

The remaining Senate bills[92] have no provisions corresponding to Recommendation XXIII. They substantially retain the present law on the subject.

SOME ALTERNATIVE SOLUTIONS

There are two different avenues of approach to the relitigation problem. One approach focuses on the reliability of the first litigation. If the decision-making process becomes more reliable and consistent,

[92] S. 1691 (Dodd bill), S. 21 64 (Yarborough-Tower bill), and S. 2597 (Dirksen bill representing the pre-Honolulu A.B.A. proposal).

there will be less motivation to relitigate. The second approach merely increases the conclusive effect of the first litigation. The cancellation, or *in rem* proposals appear to emphasize conclusiveness rather than reliability. They do not deal with the problems of forum-shopping or varying standards of patentability. The Recommendation, and to a lesser extent, the Patent Reform Bill, appear to emphasize finality at the expense of reliability and fairness.

Increasing the Reliability of the Judgement

This approach is concerned with factors which emphasize the reliability and predictability of judgements. Such judgements can then properly be given great weight in subsequent litigation. They enable a patentee to choose more rationally whether to litigate or not.

Have Fewer and Better Qualified Forums

At the present time, the final determination of patent suits is for all practical purposes made by a Circuit Court of Appeals. There are 11 of these courts. At this writing, there are about 86 active circuit judges distributed among these courts.[93] As the court usually consists of a panel of three judges, the permutations of panels even among the circuit courts is quite large. But as a practical matter, the patent cases tend to be assigned to particular judges who have had experience with them, so the actual number of panels is considerably less than the theoretical. And patent suits tend to be concentrated in certain industrialized geographical areas, a factor which also tends to lower the number of panels which decide the suits.

In the district courts, there are about 425 active judges at the present time. These judges usually sit alone on a case. Since the trial judge controls the critical fact-finding process, the district court trial carries a high degree of finality in a practical sense.

In addition, the U. S. Court of Claims handles a number of patent cases, and the Court of Customs and Patent Appeals hears appeals from decisions of the Patent Office.

Thus the present system offers a dazzling array of merchandise to the forum shopper. It also offers an exciting element of chance in that the shopper may pick a soft court only to be assigned a tough judge.

[93] Tabulated from 274 F. Supp. VIII-XX (1968).

Thus a certain amount of inconsistency (hence unreliability and unpredictability) is inherent because of the large number of courts which make the decisions.

It should be possible to improve the consistency and reliability of the decisions by lowering the number of courts which render the decisions. Numerous proposals have been directed to that end, and these are usually in terms of a single court of patent appeals. To have specialized courts for all patent litigation is unrealistic, and in fact the proposals for a single appellate court have been generally regarded as impractical. In fact, the volume of patent litigation is such that even a single court of appeals would have to have a fairly large number of panels. Moreover, the proposal would leave untouched the critical trial stage.

In any event, the prospects for a single specialized patent bench, either at the trial or appellate stage, or both, seem dim at the present time. While the judges of the Court of Customs and Patent Appeals sometimes sit as visiting judges in patent suits, this is no real solution to the problem.[94]

Provide a Screening Process for Invalid Patents

An equitable and relatively inexpensive way in which a reasonable balance may be struck between the interests of the patentee whose patent has been wholly or partially invalidated and the public interest in avoiding "strike suits" on invalid patents is to establish an administrative or judicial presuit hearing as a requisite to a suit on a patent which has been declared invalid. Such review could be accomplished in the form of a requirement that an invalid patent must be submitted for reissue before it can be enforced. The technical expertise of the Patent Office could then be used to check the abuses of patents. Alternatively, a judicial panel could be employed to make a preliminary evaluation of the merits of the suit and screen out those which are obviously devoid of merit.

Such a system of preliminary review would not present a substantial burden on present facilities because the number of relitigations is very small. It would provide a more equitable alternative to the drastic

[94] For further information, see Conway, *Single Court of Patent Appeals-A Legislative History,* Report of the Subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary, U.S. Senate (Washington, D. C.: G.P.O., 1959); Reynolds, *In Favor of a Single Court of Patent Appeals,* 13 *JPOS* 596 (1931); Schwartz, "Res Judicata as Applied in Patent Office Prosecution & Patent Enforcement Litigation," 49 *JPOS* 637, 652-655 (1967).

remedies designed to prohibit relitigation altogether. And provisions for opposition on the part of the public could further increase the fairness and conclusiveness of such review.

Such a system of review can be approached even under the present statutes. The courts recently have adopted a liberal interpretation of the reissue requirement that the patent's defects be "through error without any deceptive intention."[95] Such interpretations would appear to justify the argument that invalidity demonstrates such error.

The liberal provisions of the Federal Rules allow the courts to adopt procedures which effectively provide a preliminary review in that the court may use the pretrial conference to determine whether the suit is reasonably warranted. If the justification for the litigation is doubtful, the judge may direct that the suit be brought to trial on the sole issue of patent validity, and if the lack of merit of the patent is sufficiently clear, the judge may dispose of the case on motion for judgement on the pleadings or summary judgement. Enlightened use of the Federal Rules should provide a complete protection against any extravagant abuses of the patent right.

Preliminary review would help to insure the reliability of the earlier decision by providing an additional review. It would perpetuate the policies underlying the *in rem* invalidity concept by restricting the *type* of subsequent litigation which could be demanded as a matter of right.

Increased Conclusiveness for the First Litigation

The *in rem* invalidity proposals are extreme examples of the conclusiveness-increasing theory. The only reliability-increasing factors in the Patent Reform Bill are those factors which are aimed at the standards of invention and prior art generally. There are no provisions designed to attack the inconsistency-in-courts problem directly. The Bill does not distinguish between the case of a patent which is repeatedly held valid but receives one adverse decision in the line, and those patents which are relitigated and uniformly held invalid.

The *in rem* proposals clearly cut too wide and indiscriminate a path. A less stringent proposal having considerable merit[96] is analogous to the "security for expenses" statutes which have been employed to discourage strike suits against corporations. A patentee may relitigate

[95] *In re* Willingham, 282 F. 2d 353, 127 *USPQ* 211 (C.C.P.A. 1960); *In re* Wesseler, 368 F. 2d 838, 151 *USPQ* 339 (C.C.P.A. 1966).

[96] Schwartz, *supra* note 94 at 655-657.

within a reasonable period after his claims are held invalid. If his claims are again held invalid, the patentee must bear litigation costs as well as reasonable attorney's fees. Attorney's fees are presently awarded only under exceptional circumstances, but relitigation of an invalid patent would appear from the statistics to be an exceptional case. The court should have the power to withhold the award of fees and costs in a proper case.

This proposal would reverse the present status of attorney's fees in the case of an invalid patent. Instead of such fees being routinely withheld and granted in unusual cases, they would be routinely granted and withheld only in unusual circumstances.

There are other alternatives which can increase the effect of an adjudication without making it conclusive. There may be a shift in the burden of proof or presumption of validity. While it may be reasonable to presume a patent valid until it is held invalid, it is certainly unreasonable to presume that a patent which has been held invalid is valid. There is no reason why the presumption of validity should survive a considered contrary holding.

HOW THE SYSTEM IS PRESENTLY OPERATING

Case Histories

The following patents have been selected because they illustrate a sampling of patents which were relitigated extensively after they were held invalid.

Aghnides Patent 2,210,846

The *Aghnides* v. *Holden* case (cited *infra*) is frequently quoted to illustrate the evils of multiple litigations. The patent was granted for a water aerator adapted to be attached to a faucet or tap. It was allowed over certain prior art by a decision of the Board of Appeals.

The first reported decision on the patent is *Aghnides* v. *The Meyer's Company*.[97] This decision indicates that an earlier decision in the District Court in Chicago had held the patent invalid. But this court found the patent to be valid and infringed, pointing out that the

[97] 117 F. Supp. 839, 99 *USPQ* 488 (M. NC. 1954).

most pertinent prior art cited by the defendants had been rejected by the Examiner or the Board of Appeals. The court also pointed out that the patent had enjoyed prompt commercial acceptance and success, and that more than 18 million sales had been made in the six years preceding the suit.

The next reported decision involving this patent is *Aghnides* v. *Goodrie*.[98] This decision appears to be the appeal from the Chicago suit in which the patent was held invalid. The lower court had found the patent to be "anticipated" by the same prior art considered by the Board of Appeals. This was also the same art which the North Carolina court found insufficient in the *Meyer* case. The Court of Appeals adopted the lower court's finding of invalidity.

The next decision was *Aghnides* v. *Holden*.[99] Here Aghnides was suing another defendant in the same district where his patent had been held invalid in the *Goodrie* case. The defendant moved for summary judgement, which the court granted, pointing out that the evidence at bar did not appear to be fairly distinguishable from that in the earlier case.

The Court of Appeals reversed.[100] It noted that the suit had been pending at the time of their earlier decision in *Goodrie*. They pointed out that Aghnides averred that he was prepared to conduct new tests and present new evidence. The majority stated that

> Of course it is desirable that there should be an end to litigation. But this beneficent result cannot be attained at the expense of depriving plaintiffs of the right to show, if they can, that, as against defendants who have not previously been in court, the patent is valid and infringed.

But more widely quoted is the concurring opinion by Judge Schnackenberg:

> I believe that Judge Lindley has correctly applied the law, in its existing state, to the case before us. While the counter-affidavit of *Aghnides* is defective, I believe that it is superfluous and that he is entitled under existing law to another day in court where he may relitigate the same issue upon which he lost in the *Goodrie* case. The law does not require him to justify this indulgence. He is entitled to it because a suit testing the validity of a patent is not a proceeding *in rem* and hence Aghnides may litigate and relitigate again and again the question of validity of his patent as long as he selects a different defendant in each of the infringement suits which he files, thus avoiding the wholesome doctrine of *res judicata*. This queer result is one which we are unable to avoid. It is a situation which is

---

98 210 F. 2d 859, 100 *USPQ* 335 (7th Cir. 1954).
99 104 *USPQ* 168 (N. Ill. 1954).
100 Aghnides v. Holden, 226 F. 2d 949, 107 *USPQ* 195 (7th Cir. 1955).

> particularly abhorrent when considered against the backlog of untried cases which clogs our federal courts. The latter are cases where the litigant asks only for his day in court, not a plurality of days in court as Aghnides is entitled to under the existing law. The remedy lies not in our hands. The Congress could by legislation grant relief.

It is noted that the concurring opinion reads the facts differently from the majority. The majority based their decision on a finding that Aghnides had offered new evidence and they concluded that a summary judgement was therefore improper. The concurring opinion thought that the offer of new evidence was defective, but that a summary judgement would have been improper anyway. No mention is made in the concurring opinion of comity, nor of the prior decision being entitled to any weight whatsoever. The contrary opinions of the Board of Appeals and the North Carolina court were not mentioned. Thus the failure of the concurrence to give any weight at all to the earlier decision is contrary to the growing volume of cases which would at least give the earlier decision weight in limiting the issues to be tried in the second case.

Aghnides again shifted to the North Carolina courts.[101] In a new suit there, the court made extensive findings and gave careful consideration to the *Goodrie* and *Holden* cases. Nevertheless, it found that the invention was commercially successful and satisfied a long-felt need. It considered both the adverse decisions and its own earlier decision in *Meyer*, as well as the decision of the Board of Appeals. It held the patent valid, and the Fourth Circuit agreed,[102] adhering to their decision on reconsideration.[103]

There is no indication in the reports that the *Holden* case was ever tried after the remand. Thus on the facts, the dramatic statements in the *Holden* concurrence vastly overstate the problem. So far as they indicate that the existence of the earlier decision should be ignored, they are out of line with the prevailing trend. So far as they imply that summary judgement is improper in any case, they are contrary to the *Nickerson* case earlier noted.

Of the four suits involving the Aghnides patent, two were in the North Carolina courts. The patent was held valid in both suits. One of the two suits in the Illinois courts resulted in a finding of invalidity over the same art that the Board of Appeals and the North Carolina

---

101 Aghnides v. S. H. Kress & Co., 140 F. Supp. 582, 110 *USPQ* 234 (M. N.C. 1956).

102 S. H. Kress & Co. v. Aghnides, 286 F. 2d 718, 113 *USPQ* 395 (4th Cir. 1957).

103 114 *USPQ* 187 (4th Cir. 1957).

courts found insufficient, while the second suit apparently never resulted in a reported final decision.

Since the holding in the Chicago case was contrary to the earlier holding of the Board of Appeals, and since the North Carolina courts refused to follow the Chicago holding, one can hardly blame Aghnides for wishing to get another opinion. The case certainly does not present a picture of a patentee harassing innocent defendants on a patent which is obviously devoid of merit.

Tatko Patent 2,693,926

This patent involved a platform for holding, transporting, or storing slabs of slate. A declaratory judgement action was brought against the patentee, and the infringer moved for summary judgement of invalidity.[104] The motion was granted. The judge found that the patent "is one of unbelievable simplicity" and that "This statement finds the most support in the fact that I was able to comprehend with some ease the nature, purpose, and function of its design from a reading of the patent, the descriptions in the pleadings and affidavits, an inspection of the photographs and a view of the physical exhibits that were demonstrated by the defendant upon the argument of the motion."[105] (Apparently a patentee must hope that his invention will be judged by someone who is unable to understand a thing about it. If the judge is able to comprehend it after the trial, it must be obvious.) While there seemed to be "little dispute that this new arrangement . . . brought an advancement in utility, safety, and economy to the slate industry . . . allows a more secure handling of the slate and stone when it is being lifted and transported . . ." and that the invention was successful, it was held invalid over a combination of several patents each of which appeared to show some of the parts of the invention. The Court of Appeals affirmed the decision,[106] although they do not

[104] Vermont Structural Slate Co., Inc. v. Tatko Bros. Slate Co., Inc., 134 F. Supp. 4, 107 *USPQ* 86 (N. N.Y. 1955).

[105] This statement may indicate that the court failed to distinguish simplicity of the invention from obviousness of the invention. The fact that an invention seems simple after it is made does not determine the question of patentability. See cases cited in Notes, Smith, Patent Law 530 (1964 ed.). The dilemma of the patentee in such cases is that if he fails to describe the invention in simple terms, the court might think that he has not complied with § 112 and hold his patent invalid. On the other hand, if he describes it well enough for the judge to understand it, the judge might think it is too simple to be patentable.

[106] Vermont Slate Co., Inc. v. Tatko Bros. Slate Co., Inc., 233 F. 2d 9, 109 *USPQ* 306 (2nd Cir. 1956). Cert. den. 352 U.S. 917 (1956).

mention whether they understood it themselves or merely based their judgement on the trial judge's allegations that he had understood it.

Afterward, Tatko sued a different defendant.[107] This defendant also filed a motion for summary judgement. The plaintiff filed affidavits by nine persons to support his contention that there was a genuine issue of material fact in the case. Upon trial, the court found the patent to be valid and infringed, finding that the patent was highly successful and solved problems which had existed in the art.[108] The court of appeals reversed in a 2 to 1 decision.[109]

The *Tatko* cases do not demonstrate instances of "harassment" on an "invalid" patent. While the second suit was brought after a finding of invalidity, the first suit was forced upon the patentee by a declaratory judgement action. It was summarily decided, although it appears to have been a poor case for summary judgement. Thus the first "day in court" was understandably not wholly satisfactory to the patentee. In the second suit, the patent was found to have sufficient merit to warrant dismissal of the motion for summary judgement. Upon trial, the patent was held valid. The decision was reversed by a divided court. Thus it seems clear that the patent had sufficient merit to warrant the one full "day in court" that it received.

Pierce Patent 2,133,642

This patent claimed a piezoelectric system for producing and sustaining at a constant frequency the oscillations of an electrical system. The patent application had been filed with claims to both the piezoelectric system and a radio receiving and transmitting system which included it as an element. The Patent Office required restriction. The combination was restricted out and issued as a patent in 1931. The basic patent on the element was allowed, forfeited, and renewed. It was placed into an interference, where it prevailed after extended interference litigation.[110] The basic patent finally issued in 1938. After the combination patent expired, Pierce brought a number of suits on several related patents, including the patent on the element.

---

[107] Tatko Bros. Slate Co., Inc. v. Hannon, 111 *USPQ* 383 (Vt. 1956).

[108] Tatko Bros. Slate Co. v. Hannon, 157 F. Supp. 277, 116 *USPQ* 53 (Vt. 1957).

[109] Tatko Bros. Slate Co. v. Hannon, 270 F. 2d 571, 122 *USPQ* 585 (2nd cir. 1959).

[110] Miller v. Pierce, 97 F. 2d 141, 37 *USPQ* 823 (C.C.P.A. 1938); Miller v. National Broadcasting Co., 79 F. 2d 657, 27 *USPQ* 33 (3rd Cir. 1935).

In *Pierce* v. *American Communications Co., Inc.*,[111] both parties moved for summary judgement. Both parties filed voluminous exhibits and affidavits and agreed that they presented all of the evidence which could be adduced. The defendant asserted invalidity of the patent over the prior art and on the ground of double patenting because it covered the same invention as the expired combination patent. The court denied the defendant's motion and granted Pierce's motion for partial summary judgement. The Court of Appeals reversed and found the patent invalid for double patenting. [112] They remanded the case for entry of judgement for the defendant. On remand, the lower court found additional claims invalid,[113] and the Court of Appeals affirmed this decision.[114]

Contemporaneously with the *American Communications* litigation, Pierce was also proceeding against the Hewlett-Packard Company.[115] Both parties again moved for summary judgement. They agreed that the evidence was the same as in the *American Communications* case. They agreed that the earlier case was controlling as *stare decisis* even through the previous decision was not *res judicata* because a different defendant was involved. What the patentee contested was whether the *American Communications* decision had invalidated the claims or merely construed them in a particular manner. The court held that plaintiff's argument was plausible, but he rejected it and held the patent invalid. The Court of Appeals affirmed,[116] holding that the Patent Office's requirement for restriction was wrong and that the protections of 35 U. S. C. 121[117] were not available to the patentee because the requirement had been made prior to the enactment of the statute. The court did not give extended consideration to the policy underlying the statute, the obvious injustice of penalizing the applicant for doing what he was required to do by the Patent Office.

Seeking a more favorable climate, Pierce brought suit in the

---

111 111 F. Supp. 181, 97 *USPQ* 60 (Mass., 1953).

112 American Communications Co., Inc. v. Pierce, 208 F. 2d 763, 100 *USPQ* 1 (1st Cir. 1953).

113 Pierce v. American Communications Co., Inc., 159 F. Supp. 944, 116 *USPQ* 508 (Mass. 1958).

114 280 F. 2d 288, 126 *USPQ* 74 (1st Cir. 1960).

115 Pierce v. Hewlett-Packard Co., 125 F. Supp. 330, 103 *USPQ* 234 (Mass. 1954).

116 220 F. 2d 531, 105, *USPQ* 50 (1st Cir. 1955).

117 35 U.S.C. 121, which took effect on January 1, 1953, provides that "a patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent Office or in the courts against a divisional application or against the original application, or any patent issued on either of them . . ." if the parent and divisional were copending.

Southern District of Florida against a new defendant. He frankly admitted that his motive was to have the Fifth Circuit rule contrary to the First Circuit in the hope that the Supreme Court might grant certiorari based on conflict. The court denied a motion for a preliminary injunction, and the Court of Appeals affirmed.[118] The District Court then gave summary judgement of invalidity for the defendant, but the Court of Appeals reversed and remanded the case for trial, pointing out that genuine issues of material fact were present and that the Patent Offices's actions should be given great weight on the issue of double patenting.[119] The view of the law contained in the opinion seems to be a clear indication that the court thought the patent valid. Nevertheless, the trial court granted defendant's motion for summary judgement on the same ground of double patenting as before.[120] The judge spoke of the "protracted patent litigation," apparently ignoring the fact that all of the litigation had been on motions for injunction or summary judgement, and that the litigation had been protracted in part because of his disagreement with the appellate court. (It should have been apparent to him that his decision would further protract the litigation, because it seems clearly contrary to the views contained in the previous appellate decision.) The Fifth Circuit Court of Appeals reversed. They also spoke of the litigation as "extended and hard fought." They hastened the progress of it by not only reversing the lower court, but by holding the patent valid, and remanding the case for further proceedings on the sole issue of infringement.[121]

In further litigation, Pierce sued DuMont in the Delaware court. The defendant's motion for summary judgement was denied.[122] On trial, the court held the patent invalid for double patenting.[123] Under their view of the facts, the Patent Office had never required restriction. On the double patenting issue, the court lined up on the side of the First Circuit rather than the Fifth. The Third Circuit affirmed.[124] But they refused to grant attorney's fees to DuMont. They characterized the case as being hard and fairly fought, with no such imposition or unfairness as the statute contemplated in authorizing the grant of attorney's fees.

---

118 Pierce v. Aeronautical Communications Equipment, Inc., 223 F. 2d 410, 106 *USPQ* 11 (5th Cir. 1955).

119 255 F. 2d 459, 117 *USPQ* 311 (5th Cir. 1958).

120 198 F. Supp. 269, 130 *USPQ* 431 (S. Fla. 1961).

121 307 F. 2d 791, 134 *USPQ* 533 (5th Cir. 1962).

122 Pierce v. Allen B. DuMont Laboratories, Inc., 166 F. Supp. 333, 119 *USPQ* 108 (Del. 1958).

123 178 F. Supp. 84, 123 *USPQ* 305 (Del. 1959).

124 297 F. 2d 323, 131 *USPQ* 340 (3rd Cir. 1961).

The *Pierce* litigation demonstrates no "harassment" of the public on a meritless patent. The suits were expeditiously handled by summary proceedings in most cases. They involved essentially a single issue of law upon which the First and Third Circuits came to one conclusion, while the Fifth Circuit came to another. The Supreme Court never granted certiorari on the merits of the patents.

CONCLUSIONS

The evolution of the patent statutes indicates that the problem solved by *in rem* validity proposals has never been regarded as a serious problem. The statistics currently available indicate that the problem is essentially nonexistent at present, and the number of patents held valid on relitigation represents a large enough proportion of the relitigated patents that it is apparent that any wholesale curtailment of relitigation will be unjust in many cases.

The rare instances where a patentee abuses an invalid patent can be adequately contained by enlightened applications of the Federal Rules. The great discretion which the court possesses under these Rules, plus the financial penalties which the court can impose upon the loser of the suit, adequately enable the court to see that the patent is not employed as an instrument for oppression or harassment. Application of the doctrine of comity will also enable the court to give weight to the earlier decisions according to their merit.

If the present means of control should prove inadequate, the legislature can specifically provide either greater financial penalties on the patent abuser or greater discretion on the part of the court to make the proceedings more summary.

But the *in rem* invalidity proposals are too harsh a remedy for the problem they are designed to control. They represent a great deal of legislative "overkill." Their benefit in curtailing litigation may well be lost in the burden of unjustly suppressed patents. If the present means for controlling patent abuse fail, the policy of letting dead patents lie can be promoted by more equitable measures than the *in rem* invalidity proposals.

The First-to-File Priority System: Possibilities and Problems

STEPHEN D. KAHN*

SUMMARY

THE STATED OBJECTIVES of the patent reform effort can best be reached by the adoption of a first-to-file system of priority determination. The present interference system has serious deficiencies, and the corrective measures needed to remedy some of its ills will only aggravate others.

INTRODUCTION

AMONG ALL THE RECOMMENDATIONS made by the President's Commission on the Patent System,[1] none would make a more fundamental

Editor's Note: By making available student papers, students will receive an incentive and our readers will appreciate the evidence of scholarly development in the fields of interest. These papers are carefully reviewed by the Editorial Committee and other specialists, and helpful suggestions are made to the students as part of the educational function of *IDEA*. The positions taken by students are not necessarily those of the Research Institute. The Research Institute invites educational and research institutions to submit informative student manuscripts on the patent, trademark, copyright, and related systems.

* The author, while a third-year law student, submitted this paper in partial fulfillment for the LL.B. at Yale Law School, June 1968. Mr. Kahn is presently Patent Attorney for Bell Telephone Laboratories, Holmdel, New Jersey.

[1] This Commission was established on April 8, 1965 by Executive Order No.

change in the present state of the law than the first. Recommendation I proposed in part that "when two or more persons separately apply for a patent on the same invention, the patent would issue to the one who is the FIRST TO FILE his application."[2]

At present if more than one person files an application claiming the same invention, an "interference proceeding" is held in the Patent Office to determine which of the parties was the first to "conceive" the invention or to "reduce it to practice." To this party goes the patent. For introductory purposes, the relevant fact is that this interference proceeding allows a party who may have been the second, or the fourth, or the eighth, to file his application to obtain the patent over the party or parties who filed earlier, if he can show the earliest date of completion of the invention. While in fact the percentage and absolute number of patents which are involved in interferences is quite small, the concept that the rightful patentee is not the winner of the race to the Patent Office, but rather the first to develop the invention has wide support in industry and the patent bar.

Reaction to the Recommendation therefore has been neither slow nor apologetic. This paper will examine the Recommendation and the comment and criticism it has evoked from all quarters and then attempt to evaluate it in terms of its stated objectives:

> To encourage prompt disclosure of newly discovered technology; substitute for the delays and expense of interference proceedings a fair and inexpensive means by which an inventor can establish priority; and bring U. S. practice into harmony with that prevailing in almost all other industrial nations.[3]

The first two goals involve primarily the U.S. Patent System in isolation. Although a first-to-file system would attain these domestic goals, there were serious deficiencies in the system *as originally proposed.* The preliminary application procedure in particular, proposed by the Commission in Recommendation II,[4] would have been a disastrous innovation in our patent laws, however promising it first may have appeared. On the other hand, the present interference procedure is an unsatisfactory means of determining priority rights; as will be shown, its flaws are not only deep, but also insoluble. Since abolition of the interference is at the heart of the revision proposed, a

---

11,215, 3 C.F.R. 4661. Under the Co-chairmanship of H. H. Ransom and S. H. Rifkind it spent a year and a half preparing its *Report,* which was submitted to the President on November 17, 1966.

[2] *Report of the President's Commission on the Patent System,* (Washington, D.C.: G.P.O., November 17, 1966), at p. 5. (Hereinafter cited as the *Report*).

[3] *Report, supra* note 2, at 7.

[4] and implemented by §§ 111(c) and 120(a) of the Reform Bill, *infra* note 5.

detailed analysis of the possibilities of interference reform is a central task of anyone considering the first-to-file alternative. Accordingly a major portion of this paper will be devoted to such an analysis. The negative verdict on the interference to which this study will come forms a strong argument for the adoption of some type of a first-to-file system, though perhaps somewhat different from the one proposed.

The third goal set by the Commission is broader in scope, involving the interrelationship of the United States and other national and international patent sysems. The effect of the proposed change on progress toward international systems of patent protection is a central question, though, difficult to answer. The fact that the interference method of determining priority rights is followed by only two other nations, while the rest of the world uses a first-to-file approach, weighs heavily in favor of the Commission's call for a change.

The first-to-file proposal, together with most of the Commission's other Recommendations, was incorporated into the Patent Reform Act of 1967, introduced into both Houses of the 90th Congress, 1st Session, on February 21, 1967, as S. 1042 and H.R. 5924 respectively.[5] In Section 102 (a) and (b) the first-to-file system is provided for:

> §102 Conditions For Patentability
> A person shall not be entitled to a patent if—
> (a) prior to the effective filing date of the application, the subject matter sought to be patented was known to the public, or made available to the public by means of a disclosure in tangible form, or in public use or on sale, or
> (b) the subject matter sought to be patented was disclosed in a published United States application, or United States patent, having an effective filing date on or before that of the application for patent for the subject matter sought to be patented. . . .

With this and other sections of the Reform Act as our central texts and the Commission's Report providing the quasi-legislative history, we now begin our tour through the ins and outs of the first-to-file system.

Encouragement of Prompt Disclosure

Abolition of the Grace Period

The objective of "encourag[ing] prompt disclosure of newly discovered technology" is promoted in the eyes of the Commission by the

[5] Since the texts of the two bills are identical, citation hereinafter will be only to S.1042. Simultaneous reference to the parallel section of H.R. 5924 will be understood.

first-to-file proposal, in conjunction with another, which would eliminate what is known as the "grace period," at least its present form. The existing statute provides that a person shall be entitled to a patent (if his invention meets the tests for patentability) unless, *inter alia,*

> . . .the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States. . . .[6]

The effect of this provision is to create a one-year grace period, that is, a one-year time band stretching backward from the filing date during which the occurance of the acts enumerated will not destroy the inventor's right to the patent.[7] One very useful result of this provision is to allow the inventor or his assignee time for a measure of commercial use of the invention, a test of its actual value, before the time and expense of preparing a patent application must be undergone. It is suggested by one study that between one-third and one-half of all patented inventions are commercially used before the date of filing.[8] Since often the inventions prove commercially unsatisfactory, the result is that a great many inventions are never filed on at all. The same study, for example, estimates that corporations, which submit over 70 percent of all applications "may be filing today for only one-half or even less fraction of patentable inventions developed by their employees."[9] It is apparent therefore that the present grace period greatly reduces the number of patent applications filed at the Patent Office, probably by a hundred thousand applications per year.[10]

---

[6] 35 U.S.C. § 102 (b).

[7] Because of the present one-year grace period, any publication or public use or sale intended to void the patent must be hidden from the rightful inventor, for should he learn of it, he could, in whatever time remained in the grace period, rush an application to the Patent Office. The kind of device therefore resorted to by one who would spoil the inventor's right to a patent is illustrated by the following excerpt:

> **Sometime when you are in a remote section of the country and are looking at a small town weekly newspaper, have you ever found a very sophisticated technical article in there of no interest to any reader of that paper and wondered how in the world it happened to get in the Conoquenessing Valley News? That is a spoiling publication. Jackson, "Is Compatibility of U.S. and Foreign Law Desirable?" *IDEA*, Vol. 10 (Conference Issue 1966), p. 193, 194.**

[8] B. S. Sanders, "Speedy Entry of Patented Inventions into Commercial Use," *PTC J. Res. & Ed. (IDEA)*, Vol. 6, No. 1 (Spring 1962), pp. 87, 90.

[9] *Id* at 114.

[10] Approximately 100,000 patent applications are filed each year. Brenner, "Patent Office Activities During 1966," 48 *JPOS* 475, 480 (1966). Corporations therefore file roughly 70,000 (100,000 x 0.70) applications and fail to file on another 70,000 to 140,000 inventions.

As an adjunct to the first-to-file proposal, however, the President's Commission has recommended the abolition of this grace period.[11] The parallel section of the Reform Bill states in part:

> A person shall not be entitled to a patent if—(a) prior to the effective filing date of the application the subject-matter sought to be patented was known to the public, or made available to the public by means of a disclosure in tangible form, or in public use or on sale. . . .[12]

Under this wording, any "disclosure in tangible form" by anyone or sale or public use which antedated the effective filing date would prevent the issuance of a patent. Clearly no testing of the invention on the market would be permitted before that date, and in fact the opportunities presented for accidental disclosures and industrial espionage to void patents by spoiling publications could lead to greatly increased secrecy in industrial practices. An inventor's right to a patent could be instantly destroyed at any moment before he had filed. The Conoquenessing Valley News and similar papers would no longer be favorite journals for spoiling publications; any convenient low-rate paper would be just as good. The fact that the article would not have a good chance of remaining unseen by knowing eyes for a year would be totally irrelevant.

As the Reform Bill originally read, however, this was not the whole picture. Inventors, it was anticipated, would file a preliminary application as soon as an invention was fixed in their minds, before any possibility of misappropriation could arise. If the preliminary application sufficiently described the final form of the invention, the inventor could rely on its filing date to protect his priority rights.[13] Once such an application had been filed, the inventor could test the invention for one year before deciding if it had enough commercial promise to warrant the expense of proceeding for a patent. The grace period would have been strictly speaking not eliminated but altered in its time position.

By placing this burden on inventors to file immediately, the Commission's plan ultimately would encourage prompt disclosure. Under Section 123 of the Reform Bill, pending complete applications must normally be published within 18 to 24 months of their earliest effective filing date, i.e., the date of filing of the earliest preliminary application, whereas under present practice applications are secret

---

[11] *Report, supra* note 2, Recommendation I at 5.
[12] S.1042 § 102.
[13] S.1042 §§ 111(c) and 120(a).

until the patent is granted.[14] In this way the public would learn more promptly of newly discovered technology. In the words of Commissioner of Patents, Edward Brenner, testifying on behalf of the Reform Bill in 1967:

> . . . this [earlier filing and disclosure] will promote advances based upon the disclosed work and prevent duplication of effort. Equally important, it will apprise businessmen at an early date of the invention and of the inventor's rights.[15]

The preliminary application procedure and the abolition of the grace period raise attendant problems however of large magnitude.

It is difficult to explain the necessary interrelationship between the first-to-file system and the total abolition of the grace period. Certainly it is essential to a first-to-file system that a party not be allowed an absolute grace period as to disclosures by other parties. The basic premise of a first-to-file system is that the situation as of the filing date determines priority rights. Therefore a first-to-file system in which a prior disclosure by another party[16] would not normally bar the first party from applying for a patent, would be internally inconsistent.

What is less clear is the necessity of also eliminating the personal grace period, the right of the inventor to use the invention for a certain period before filing an application. This type of grace period is found in the patent systems of several countries using the first-to-file approach.[17] Allowing the inventor this grace period would encourage continuation of the present practice of testing before deciding whether or not to file. This in turn would save the Patent Office from inundation by a hundred thousand applications a year on unproductive inventions.[18] The proposal with which this paper will conclude adopts this approach by allowing a grace period with respect to third party disclosures in the event that the later applicant had commenced public use of the invention before his opponent had either done similarly or had filed. The date of first public use is considered a constructive filing date in the event of a priority dispute. While this procedure would not be in harmony with a strict first-to-file system, it

---

[14] 35 U.S.C. § 122 provides that "applications for patents shall be kept in confidence by the Patent Office. . . ."

[15] 49 *JPOS* 303, 313 (1967).

[16] Whether investitive (i.e., the filing of a patent application) or divestitive (i.e., a free and open dissemination to the world) as to that party.

[17] E.g. Great Britain, West Germany, and Japan. Goldsmith, H. "The U.S. Patent System: Has It Come to the End of the Line," *IDEA*, Vol. 11, No. 3 (Fall 1967), p. 333, 339.

[18] *Supra* note 10.

would preserve the basic first-to-file approach to priority rights and at the same time would also preserve the grace period.

Admittedly, to disallow the third party grace period in most cases while allowing a personal one would raise difficult questions of fact. If a nominally third party disclosure were challenged by the would-be patentee on the ground that the invention was not independently developed but instead adapted or stolen from his, a court would be forced to decide whether the third party had merely copied the original party's work or had reached the same result independently. On the other hand, this is just the same question which is commonly considered by courts in copyright cases, where the question of independent creation determines whether or not the third party has infringed the copyright.[19] In this latter context the courts have not found their task impossible, and in the patent context they should find evidence of origin, in the form of notebook entries, et cetera, more plentiful.

In sum, the only reason for abolishing all grace periods as the Reform Bill would do is to force inventors into the early filing of a preliminary application. But investigation of the preliminary application procedure has demonstrated to all parties that it would be wholly unworkable, and it now appears certain that it will never be adopted.[20] Therefore, the sole argument for total abolition of the grace period is no longer legitimate, and modification of the reform proposals along the lines suggested seems essential.

Abolition of Interferences

Outline of Present Interference Practice

The second stated purpose of the first-to-file proposal is to "substitute for the delays and expense of interference proceedings a fair and inexpensive means by which an inventor can establish priority."[21] Any assessment of this facet of the Recommendation involves a comparison of the operation of the first-to-file rule and the present interference system.

The interference proceeding provided for in the statute[22] is concerned with the question of "priority of invention." It is called for

---

[19] See e.g., Fred Fisher Inc. v. Dillingham, 298 Fed. 145, 147 (S.D.N.Y. 1924).

[20] In view of the unanimity of opinion on this point, in which the author shares, the preliminary application proposals will be treated no further.

[21] *Report, supra* note 2, at 6.

[22] 35 U.S.C. § 135.

"whenever an application is made for a patent which in the opinion of the Commissioner would interfere with any pending application, or with any unexpired patent."[23] The interference procedure has been a part of the U.S. Patent System since 1836.[24]

When there appears to be cause for an interference, the junior party is normally required, before the contest is declared, to submit some form of affidavit, the particulars of which depend on the time spread between the parties' filing dates.[25] Once an interference is declared, the *ex parte* prosecution of an involved application is usually suspended.[26] The interference commences with the exchanging and filing of preliminary statements[27] and the filing and disposition of motions[28] and then proceeds to the taking of evidence.

Following the disposition of motions, or the close of motion period if none were filed, the parties are assigned times for the taking of testimony.[29] This key facet of the evidence-gathering process is done entirely out of sight of the interference examiner and the Board, by deposition on oral examination or by affidavit.[30] Transcript copies of the testimony are filed with the Patent Office, as are briefs of the parties.[31]

The final step is the hearing before the Board of Patent Interferences. Here for the *only* time during the entire proceeding there is face-to-face confrontation between the decision-makers and counsel for the opposing parties. Oral arguments are normally limited to one hour for each party.[32] *Never* does the decision-maker see or hear any live testimony. After the final hearing, "nothing further" relating to the case will be heard, unless upon request of the Board.[33]

Appeal is available from an adverse decision of the Board to the Court of Customs and Patent Appeals, or by civil action under 35 U.S.C. §146 in the district courts.[34]

---

[23] 35 U.S.C. § 135(a).

[24] 5 Stat. 117, Patent Act of 1836.

[25] See Rules 202, 204. The Rules of Practice, promulgated by the Commissioner of Patents under the authority of 35 U.S.C. § 6, are officially cited as 37 C.F.R. 1.XXX. Citation in this paper will be as Rule XXX, following standard Patent Office usage.

[26] Rule 212.

[27] See Rules 207(b)(1), 215, 216.

[28] See Rules 207(b)(3), 231, 243.

[29] Rule 251.

[30] Rule 272(a) & (c).

[31] Rules 253 & 254.

[32] Rule 256(a).

[33] Rule 256(a).

[34] Rules 301 & 303.

The burden of proof throughout the interference proceeding is on the junior party:

> The parties to an interference will be presumed to have made their inventions in the chronological order of the filing dates of their applications for patents involved in the interference or the effective filing dates which such applications have been accorded; and the burden of proof will rest upon the party who shall seek to establish a different state of facts.[35]

The litigated cases have clarified the degree of proof that the junior party must present in order to prevail. It is established that in an interference between co-pending applications, or between a patent and an application filed before its issue date, the junior party must show his earlier invention date by a "fair preponderance" of the evidence.[36] In an interference between an application and a patent issued before its filing date, the evidence of a prior invention date must be clear beyond a reasonable doubt.[37]

When the junior party comes to present his case, what is it he must prove? What, in other words, must a party have done at a time certain for that to be his invention date? The statutory language suggests the various tests:

> In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was the first to conceive and last to reduce to practice, from a time prior to conception by the other.[38]

The terms "conception" and "reduction to practice" are clearly terms of art. "The conception of the invention," says the most often-cited formulation:

> . . . consists in the complete performance of the mental part of the inventive act. All that remains to be accomplished in order to perfect the act or instrument belongs to the department of construction, not invention.
>
> It is therefore the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is thereafter to be applied in practice that constitutes an available conception within the meaning of the patent law.[39]

Yet conception, the idea in the head of the inventor, is not sufficient

---

[35] Rule 257 (a).

[36] Carusi v. Looker, 342 F.2d 112, 114 (CCPA 1965); Creamer v. Kirkwood, 305 F.2d 486, 490 (CCPA 1962).

[37] Paivinen v. Sands, 339 F.2d 217, 220 (CCPA 1964); Kruger v. Resnick, 197 F.2d 348, 349 (CCPA 1952).

[38] 35 U.S.C. § 102 (b).

[39] Townsend v. Smith, 36 F.2d 292, 295 (CCPA 1929).

to support a patent. The additional concept of "reduction to practice" ensures that the invention in fact is usable as described in the application. Its meaning as applied to various kinds of inventions has been formulated often. Perhaps the most general definition by the Supreme Court was given eighty years ago in a case involving a machine used for winding thread onto spools:

> It is evident that the invention was not completed until the construction of the machine. A conception of the mind is not an invention until represented in some physical form, and unsuccessful experiments or projects, abandoned by the inventor, are equally destitute of that character.[40]

In the case of a patent on a chemical compound, useful as an accelerator in the manufacture of rubber, the Court said:

> It was the fact that it would work with great activity as an accelerator that was the discovery, and that was all, and the necessary reduction to use is shown by instances making clear that it did so work, and was a completed discovery.[41]

Invention within the meaning of the statute requires both conception and reduction to practice. It is not enough that a party conceived a solution to a vexing problem of manufacture or thought of a wholly new electronic device or chemical composition; he must also have developed the idea to the point of practical use.[42]

In sum then, the law normally has made reduction to practice the key act. The sole exception to this rule is the "diligence principle," which is provided for in the statute.[43] If the later party to reduce the invention to practice nevertheless conceived it earlier *and* was diligent in working to achieve his reduction continuously from a time just before his opponent's conception to the time of his own reduction to practice, the law provides that he will be the one entitled to the patent. In other words, the law prefers the party first to conceive, although he may have been slower to reduce to practice, *if* he can show diligence, *not* from the time of his own conception, but from a time just before his opponent's date of conception. The effect of this rule is best made clear by an example.

---

[40] Clark Thread Co. v. Willimantic Linen Co., 140 U.S. 481, 489 (1891).

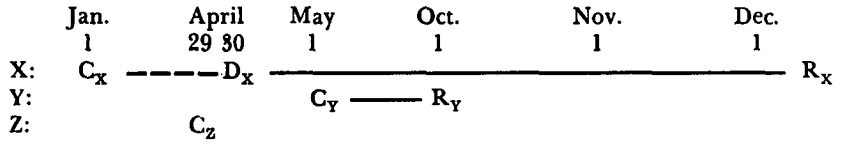
[41] Corona Cord Tire Co. v. Dovan Corp., 276 U.S. 358, 382-83 (1928).

[42] While the invention must be shown to function in the manner predicted, it is established since the famous Telephone Cases that perfect operation is not necessary for a reduction to practice:

> The law does not require that a discoverer or inventor, in order to get a patent for a process, must have succeeded in bringing his art to the highest degree of perfection. It is enough if he describes his method with sufficient clearness and precision to enable those skilled in the matter to understand what the process is, and if he points out some practical way of putting it into operation. The Telephone Cases, 126 U.S. 1, 536 (1888).

[43] 35 U.S.C. § 102(b). *Supra note* 38, and accompany text.

Assume that a party X, conceived his invention on January 1, did not begin diligent efforts to reduce it to practice until April 30, and achieved this reduction on December 1. Assume further that another party Y, conceived the same invention on May 1 and began diligent efforts immediately to reduce it to practice, efforts which were successful on October 1. This set of events can be represented schematically as follows:



(solid line represents diligence; dashed line represents non-diligence). Under the law X will be the rightful inventor, although he did nothing to reduce his idea to practice from January 1 until April 30, and then took seven months to do so. Y, who never put the invention aside, but rather proceeded immediately and skillfully to reduce it to practice, succeeding in a much shorter time than X, will not be entitled to the patent.

Or consider the case of Z, another applicant for the same patent. Z conceived the invention on April 29, two days before Y's conception and one day before X began his continuous diligence which culminated in a reduction to practice on December 1. If Z began his period of diligence immediately, no matter when his reduction to practice was achieved he would have the right to the patent over both X and Y by virtue of his prior conception and commencement of diligence. On the other hand, if Z was not diligent for as little as two days, until May 2, then no matter how quickly he reduced the invention to practice, he would lose to both X and Y.

Criticism of Interference Procedure

Criticism of the interference procedure is not hard to come by. In recent years a number of articles have appeared analyzing, criticising, and proposing changes in the interference practice.[44] The general

[44] See Stern, "Priority Paradoxes in Patent Law," *Vanderbilt Law Review,* Vol. 16 (1962), p. 131; Frost, G., "Possibilities and Limitations of Patent Interference Reform," *PTC J. Res. & Ed. (IDEA)*, Vol. 7, No. 2 (Summer 1963), p 162; De Simone, Gambrell, and Gareau, "Characteristics of Interference Practice," 45 *JPOS* 503 (1963); Crews and Crews, "Introduction to Interference Law and Practice," 46 *JPOS* 755 (1964); Stedman, "The U.S. Patent System and Its Current Problems," *Texas Law Review,* Vol. 42 (1964), p. 450; Crews, "Interference Practice and the New Rules," 48 *JPOS* 411 (1966).

dissatisfaction is mirrored in the words of the Commission's Report: there was much feeling that interferences were expensive, productive of delays in the issuance of patents, and unfair to the parties.[45] On the accuracy of these charges depends much of the Commission's case against the interference. The immediately following segments of this paper will consider in turn each of these aspects of the case against the interference.[46]

Delay

Thanks to a recently published statistical study of interferences, many new facts are available to aid in analysis and discussion.[47] This study showed that out of a total number of 4,065 interferences which terminated in a priority judgment for one party,[48] the senior party was awarded 73 percent of the judgments and the junior party 27 percent.[49] In other words, when interference proceedings went to judgment the senior party won three out of every four times.

However, the study also revealed that in interferences pressed all the way to the testimony stage, the senior party won 55 percent of the time and the junior party 45 percent.[50] In other words, the overall percentages greatly favor the senior party, but they also show that if the junior party presses his challenge to the testimony stage, the odds against his victory are reduced to near equipoise.

This result should not be surprising. The pre-testimony stages of the interference proceeding are designed to determine if in fact the junior party has a claim to an earlier invention date than the senior party, and to indicate to the opposing parties the nature of the evidence relied on by all parties. Often the preliminary statement will show

---

[45] See *supra* note 3, at p. 2, and accompanying text.

[46] As one glance at the size of the Pocket Part of the U.S.C.A. indicates, a thorough overhaul of the interference rules was recently completed. No reports on the effect of the changes are yet available. See generally, Crews, *supra* note 44.

[47] De Simone, Gambrell, and Gareau, *supra* note 44 (hereinafter cited as De Simone *et al.*). This study involved a general analysis of all 6,572 interferences declared during the 1950's, a detailed dissection of a 10% random sample of these, and a further dissection of a 10% random sample of all interferences in that decade involving testimony.

[48] The remaining 2,507 proceedings were terminated either by abandonment by one party, by dissolvement, or by a split award. No breakdown appears into these categories.

[49] The raw figures were 2,951 to 1,114. (De Simone *et al.*, *supra* note 44, at 521.

[50] Out of 713 interferences in which testimony was taken, the junior party won 318, the senior party 395. *Idem.*

that no such earlier date is claimed by the junior party. Often too, the junior party will abandon the fight in spite of the legal sufficiency of his preliminary statement for tactical or financial reasons. If this occurs, the senior party is entitled to judgment immediately, without the necessity of the taking of testimony[51] Only the legitimate and determined junior party, or the very determined illegitimate one, will proceed to the testimony stage, and therefore it is reasonable to expect that this sub-class of contestants should do better than the class of all junior parties. Moreover, this showing weakens the case of those who cite the 73 to 27 percent spread as evidence in support of arguments for the abolition of the interference. These arguments rely on the three to one spread and maintain that the effort to protect the one in four is not worth the cost to the system as a whole. If the spread largely disappears before the most costly phase is ever reached, the force of this argument is weakened.

While the senior party will win, if past trends continue, three out of four interferences declared, the facts remain that one out of four will be won by the junior party and that he will win over 40 percent of those which move very far down the process. Abolishing the interference in favor of a strict first-to-file procedure would deprive, at the 1950's rate over one thousand first inventors per decade of the patents to their inventions.[52] As simplicity by itself is a hollow virtue, the argument for abolition must be filled out by an explanation of the balancing cost which makes it unwise to continue to provide these one thousand inventors per decade of their opportunity for redress.[53]

Deeply interwoven with the above argument is the question of delay. One of the most frequent criticisms of the patent examining system as it operates today is that years often elapse from the time a patent application is filed until a patent is obtained.[54] The Report of

---

[51] Rule 225.

[52] This proposition assumes the interference to be a fair, accurate method of determining who is the rightful patentee. To the extent that the procedure is deficient in these respects, the above figure must be decreased.

[53] See preceding note.

[54] This complaint is voiced by critics on opposite sides of the fence. Inventors who fear piracy of their inventions complain that the delay enables unscrupulous companies to flood the market with their invention before they are fully able to stop them with an issued patent. The general rule is that there can be no infringement of a patent before it issues. Even assuming that piracy could be proven, it is still uncertain whether relief is available. See Krizman v. Bouchard, 142 F.Supp 269, 270 (N.D. Ind. 1956).

Yet the complaint is also lodged that the delays benefit the patentee, let him extend the patent monopoly beyond the 17-year statutory period, since few parties would take the risk of building up production facilities during the application

the President's Commission states that "the average period of pendency [is] two-and-one-half years from filing to final disposition," and notes further that, as the subject-matters and complexity of applications keep increasing, the backlog problem will not improve.[55] The Commission also notes that a "substantial" number of applications have a period of pendency of up to ten years.[56] When the delays which inevitably accompany an interference are added to the normal time period required for the examination of an application, the issue date can recede to the horizon.[57]

Once again the recent Patent Office study provides relevant evidence. The average duration of interferences in the 1950's, from the date of declaration to date of termination was 534 days, or just under 18 months.[58] A further breakdown of this figure reveals that the average duration of interferences not involving testimony (i.e., terminating before the testimony stage was reached) was 461 days, while that for interferences in which testimony was taken was 912 days, or two-and-one-half years.[59] The 18-month figure compares with the figure of 13 months cited to the Senate Subcommittee on Patents, Trademarks, and Copyrights as the average duration of all interferences declared in the years 1939 and 1940.[60] Furthermore, the backlog of interferences declared and pending rose from 849 in 1950 to 1869 in 1962,[61] so it appears that if anything the delays are probably increasing over time.[62] The delay figures become more meaningful when combined with the cost figures.

---

period, no matter how long it dragged on, because they realize that the issuance of the patent could prevent them from producing long enough to make any return on their investment.

[55] *Report, supra* note 2, at 2.

[56] *Report, supra* note 2, at 2.

[57] The standard example cited to make this point is that of the Jorgensen patent on the automatic choke for automobile engines. The application for this patent was pending for a total of 23 years and nearly 3 months, of which time over 20 years was caused by interferences. *Hearings, "American Patent System," October 10-12, 1955, Subcommittee on Patents, Trademarks, and Copyrights of the Senate Committee on the Judiciary, 84th Cong. 1st Sess.,* at 287 (Washington, D.C.: G.P.O. 1956). (hereinafter cited as *1955 Hearings*).

[58] De Simone *et al., supra* note 44, at 523-25.

[59] De Simone *et al., supra* note 44, at 526.

[60] *1955 Hearings, supra* note 57, at 289.

[61] De Simone *et al., supra* note 44, at 517.

[62] It was one of the express goals of the committee which revised the Patent Office Rules of Practice to reduce the delays and the backlog. One patent attorney interviewed who was active on the committee stated that since the new rules have gone into effect, the backlog has been cut and delays reduced. Interview 1, conducted March 4, 1968. How much remains a question.

Cost

Cost figures demonstrate, even compared to the expense of obtaining a patent,[63] how expensive an interference proceeding can be. Records of the corporate research laboratory studied for this paper show that 51 hours of attorney's time was spent, on the average, for each interference involving one of its applications.[64] Reducing this to monetary values at the rate of $40 per hour, the result is that an average interference costs approximately $2500. A member of the patent division staff at the same laboratory suggested that the taking of testimony, the writing of a brief, and the preparation for a final hearing require somewhat over half the total time spent in all stages of an interference.[65] His estimate applied to figures already cited reveals that the cost of an interference involving testimony exceeds $4000.

What these figures, combined with the delay figures, demonstrate is the tremendous burden which an interference proceeding puts on any but the most financially secure applicant. Before he has had a full opportunity to test the commercial value of the invention he is forced not only to meet the normally heavy costs of preparing and prosecuting a patent application, but also to spend thousands of dollars to establish his right to the patent. Furthermore, since the *ex parte* prosecution of an application is normally suspended during the interference,[66] and since interferences can last for years, especially if testimony is involved, his opportunity to earn back the dollars spent in the contest will be far in the future.

Testimony and the Corroboration Rule

Turning from the questions of cost and delay to the intrinsic quality of the interference as a means of reaching truth, several features deserve consideration. The first of these is the manner in which testimony is taken and used. As noted above,[67] testimony is entirely

[63] The cost of filing and prosecuting a patent application includes approximately $150 in filing and issuance fees, plus attorney's costs. (Fees are provided for in 35 U.S.C. § 41). This latter component, according to one estimate, can range from a realistic minimum of $450 (for an easily drafted application and one Patent Office action) up to several thousand dollars as the complexity of the application and its path through the examining procedure increase. Therefore, total costs would range from $600 on up. Interview 1, *supra* note 62.

[64] Interview 1, *supra* note 62.

[65] Interview 3, conducted March 4, 1968.

[66] Rule 212, *supra* note 26.

[67] *Supra* note 30, and accompanying text.

written. The parties may orally question witnesses in the course of taking their depositions, but this is done before officials not connected with the Board which must finally decide the case. As one critic wrote:

> As a practical matter, interference testimony is taken more or less informally. The Patent Office ends up with a record composed of what one party seeks and the other does not oppose.[68]

The impact of the fact that testimony is presented to the Board in typewritten form, weeks or months after it was taken out of their sight and hearing, is at least three-pronged. First:

> . . . the inability of the Board of Interference Examiners to ask questions may result in a key question never being asked and never being answered.[69]

Second, since the attorneys taking the depositions know that Board members, being only human, may read over a crucial fact, they are unwilling to rely on a single admission. Instead, they "pad the record" with redundant material.[70] This fact, on the other hand, is certainly well known to the Board members, and its influence on the care with which they read the record presented to them can only be negative.

Third, there is the very basic fact that the credibility of the witnesses can only be judged from dry print. This point was emphasized before the Senate Subcommittee by John H. Bruninga, the attorney who represented the parties behind the Jorgensen patent mentioned earlier.[71] He cited two instances to the Subcommittee, both involving that patent, where the federal courts on appeal reversed priority awards made by the Patent Office. The two reversals, he said:

> . . . show the difference between a case where the judge sees as well as hears the witnesses, and a case involving depositions and dry print.[72]

In an attempt to compensate for this deficiency the Patent Office has developed and clung to a rule of practice which requires that testimony of an inventor be corroborated by an independent source or else be legally insufficient proof.

> . . . [T]he law . . . refuses to accept [the testimoney of a party] as proof of any critical fact except as corroborated by the independent first-hand testimony of some other witness.[73]

---

[68] Frost, *supra* note 44, at 179.
[69] Frost, *supra* note 44, at 180.
[70] Interview 4, conducted March 18, 1968.
[71] *Supra* note 57.
[72] *1955 Hearings, supra* note 57, at 275.
[73] Crews and Crews, *supra* note 44, at 790.

The requirement of corroboration applies to all elements of proof of priority of invention.[74] The leading exposition of the history and logic of the doctrine appeared in the following form:

> The doctrine . . . began with Commissioner Fisher's holding in *Doughty* v. *Clark,* 1869 C.D. 14 that definite and corroborated testimony must prevail over indefinite and uncorroborated testimony, and became a positive rule of law based upon public policy.
>
> [Corroborating evidence] must be such as to carry conviction and serve to remove the determination of dates of inventive acts from the exclusive control of the inventor . . . Otherwise . . . each inventor could set the dates to suit himself and there would be no check upon them.[75]

The result of this rigid rule is that unless the inventor can produce an independent witness to verify his own testimony, he is out of court. There is no room for the argument that his character is beyond reproach:

> The integrity of the witness does not take the place of corroboration.[76]
>
> All the witnesses appear to be men of high character, and the testimony of appellant, together with his notebook and time card, is very impressive; but unless there be independent corroboration of his testimony . . . no award of priority . . . may be made.[77]

The wisdom of such a rule is obviously open to question. Even conceding the tendency of inventors to lie freely under oath, an assumption at least arguably ill-considered, the rule contains no distinction depending on the inventor's financial interest in the patent that may be awarded. At a time when a solid majority of the more advanced technical inventions (the ones most likely to become involved in interferences) are assigned by employee-inventors to their employers for no particular consideration, the motivation for risking perjury should not be so commonly present.[78] And even in the case of

---

[74] Baker, *Outline of Interference Practice* at 63 n.2 (13th revised ed. 1966).

[75] Weber v. Good, 129 *USPQ* 32, 42 (Pat. Off. Bd. of Interferences 1960). Cf. an early English statement of the rule's foundation, contained in this excerpt from Algernon Sidney's *Apologia,* 9 How. St. Tr. 916, 927 (1683).

> It is hard for two or more so to agree upon all the circumstances relating unto a lye as not to thwart one another.

[76] Dessert v. Gelzheiser v. Middendorf v. Norden, 144 *USPQ* 137, 139 (Pat. Off. Bd. of Interferences 1964).

[77] Kear v. Roder, 115 F.2d 810, 817 (CCPA 1940).

[78] Three separate studies concur in the finding that roughly 70% of all patents, and an even higher percentage of those in the more technical electrical and chemical fields are issued to corporate inventors. These employee-inventors receive a fixed salary from their employer, and in return on accepting employment execute

the independent inventor, would dishonesty be so common and so great a risk as to outweigh the injustice caused by the strict application of the rule of corroboration as described in the *Dessert* and *Kear* cases above?[79]

Further ground for criticism of the rule is discussed by Wigmore in his classic treatise on the Law of Evidence.[80] Noting the development of this rule, and also the fact that it has never completely been sanctioned by the Supreme Court, Wigmore wrote:

> Nor should it be. There can be no need for such a rule of law, (Cross-citation to §2033) especially where the evidence is weighed by a seasoned official acting without a jury. If the official does not believe the claimant's assertion, his own reasoning suffices to support his judgment of credibility. If he does believe the assertion, he should not be hampered by a fixed rule of thumb interfering with that judgment.[81]

We concede Wigmore's argument seems somewhat misdirected, since under the present procedure, the official never sees or hears live testimony, and must judge credibility therefore from printed pages alone. Nevertheless, his first support for the position taken, made in the section cross-referenced, is not at all out of place in the interference context:

> Conceding the occasional dangers of trusting a single witness, a curative rule requiring two witnesses, or formal corroboration of a single witness, is not sufficiently efficacious to overcome the new dangers and disadvantages which are thereby introduced.[82]

The new dangers Wigmore feared are summed up in his quotation of Napoleon's statement, uttered when he abolished the numbers-rule of the civil law:

---

assignment agreements transferring all future rights to inventions made in the course of their employment to their employer.

Their personal stake in the outcome of an interference is therefore nil. Only a natural desire to see their employer win over another, and a possible indirect benefit to themselves (through promotion systems based on patents issued rather than on applications filed) would motivate dishonesty. And these motivations, being substantially weaker than those encouraging an individual inventor, could more easily be overcome by the moral and legal consequences of falsifying testimony.

The three articles are Bryant, "The Patent Mess," *Fortune* (September 1962), at Ill; Colvin, "Increasing the Production of Inventions," *PTC J. Res & Ed. (IDEA)*, Vol. 7, No. 2 (Summer 1963), p. 229, 231; Sanders, "Further Work on The Number of Living Patentees," *PTC J. Res. & Ed. (IDEA)*, Vol. 9, No. 3 (Fall 1965), p. 79.

[79] *Supra* notes 76 & 77.

[80] Wigmore, *The Law of Evidence* (3rd. ed. 1940).

[81] Wigmore, *supra* note 80, at § 2065A.

[82] Wigmore, *supra* note 80, at § 2033.

> Thus one honorable man by his testimony could not prove a single rascal guilty; though two rascals by their testimony could prove an honest man guilty.[83]

It should be noted that Wigmore's apparent misconception concerning the manner in which testimony is taken and used in interference proceedings buttresses his case against the rule in this respect. Given the deposition procedure and the consequent ability of the witness to take great care in stating his response without appearing evasive to the ultimate reader, the chance of a fabricated story being destroyed by probing examination is substantially less than if the witness were seated in open court before the eyes of the trier of fact. In other words, the possibility for falsification of dates is increased by the deposition procedure, and the fact weakens the standard argument in support of a rule of corroboration.[84]

In sum, the rules surrounding the taking and use of testimony are far from ideal. The gathering of the record is left entirely to the parties, and it is presented to the decision-maker only on paper. The rule of corroboration establishes a rigid bar likely to trap only the innocent, independent inventor who does not have the help and advice or the particular knowledge that is available to the corporate employee and would be known by anyone intent on falsifying evidence.

Problems of Review

A party dissatisfied with the decision of the Board of Patent Interferences may at his option appeal either to the Court of Customs and Patent Appeals,[85] or "have remedy by civil action in the district courts."[86] His election of one remedy bars later resort to the other,[87] and the choice made has significant effects on the nature of review exercised.

In the Court of Customs and Patent Appeals, no live testimony is heard; the Court determines the appeal solely on the written evidence adduced before the Patent Office tribunal.[88] Decisions of the Board of Patent Interferences are given substantial weight, particularly if there were a series of concurring decisions rendered in the same case.[89]

---

[83] *Idem.*

[84] See *supra* note 75 and accompanying text.

[85] 35 U.S.C. § 141.

[86] 35 U.S.C. § 146.

[87] 35 U.S.C. § 146. See e.g., Tibbetts Industries Inc. v. Knowles Electronics Inc., 263 F.Supp 275, 277 (E.D. 111. 1966).

[88] 35 U.S.C. § 144. See e.g., Appl. of Azorlosa, 241 F.2d 939, 941 (CCPA 1957).

[89] Simpson v. Neracher, 191 F.2d 416, 425 (CCPA 1951).

Nevertheless, one experienced attorney stated categorically that this Court is more willing than the district courts to overturn a decision of the Patent Office.[90]

The alternative method of review is in these district courts. Here there is a full trial *de novo;* the parties are free to introduce any competent and relevant evidence irrespective of what was submitted to the Patent Office.[91] However, the presumption of correctness given by the district courts to the Patent Office decision is almost unsurmountable.

The rule as to standard of proof derives from the case of *Morgan* v. *Daniels*[92] wherein Mr. Justice Brewer wrote for the Court that a suit under §4915, Revised Statute, the predecessor of 35 U.S.C. §146, was:

> . . . something in the nature of a suit to set aside a judgment, and as such is not to be sustained by a mere preponderance of evidence. . . .
>
> . . .[I]t must be laid down as a rule of law that where the question decided in the Patent Office is one between contesting parties as to priority of invention, the decision there made must be accepted . . . unless the contrary is established by testimony which in character and amount carries thorough conviction.[93]

From this case has derived the rule that evidence to warrant a reversal of the Patent Office decision must be such as to carry thorough conviction that the Patent Office erred. The modern cases stating this rule cite *Morgan* v. *Daniels* and also rely on Rule 52 (a) of the Federal Rules of Civil Procedure[94] and the expert nature of the Board of Patent interferences for support of the position.[95]

A party seeking review of a Patent Office decision must therefore choose between two routes; one involving the same written record as that before the Patent Office but a reachable standard of proof, the other, a full trial *de novo,* with live testimony and freedom to

---

[90] Interview 1, *supra* note 62.

[91] Muller v. Olin Mathieson Corp., 240 F. Supp 662, 664 (S.D.N.Y. 1965).

[92] 153 U.S. 120 (1894).

[93] 153 U.S. at 124-25. The motivation of the Court in announcing this rule may be partially explained by the fact that the award of priority had been reversed *three* times on the same record before the case reached the Supreme Court; with two of these reversals occurring within the Patent Office. *Id.* at 122. The question was clearly a very close one, and the Court could reasonably have felt that nothing was to be gained in such a case by involving the mainline federal courts. If this is the explanation for the Court's treatment, one can only wish that its language had been less sweeping.

[94] 28 U.S.C. § 52 (a): ". . . Findings of fact shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses."

[95] See e.g. R.C.A. v. International Standard Electronics Inc., 232 F.2d 726, 729 (3rd. Cir. 1956).

introduce new evidence, but a very heavy burden of persuasion. What seems indefensible in this situation is the standard of proof required by the district courts in the trial *de novo*. To open up the case so completely, and then to stifle the district court under a presumption of such weight is a basically inconsistent procedure.

The reason underlying the continued vitality of the rule of *Morgan* v. *Daniels* is probably found in the sentiment expressed by Mr. Justice Clark in the recent case of *Graham* v. *John Deere Co.*,[96] and no doubt seconded by every other mainline federal judge in the country:

> . . . [T]he judiciary . . . is most ill-fitted to discharge the technological duties cast upon it by patent legislation.[97]

But this fact, which as a general rule is surely true, in the present context seems largely irrelevant.

If a trial *de novo* is ever held, it will be after an opinion has been rendered by the Board of Patent Interferences. Except for the new evidence, the district judge will be recovering ground gone over by the Board. In view of this, it would be reasonable for the courts to give substantial weight to the findings of the Board *except* as to matters of credibility. Technical conclusions or findings by the Board should be accepted unless clearly erroneous; technical matters are within the Board's area of special competence and the courts' area of general incompetence. But as to questions of credibility, there is no reason why the judges should not make an independent judgment, without giving *any* presumption *at all* to the findings of the Board. The policy of Rule 52 (a) in fact would *require* this procedure. That rule is intended for use in the civil courts, where the trial judge sees and hears the testimony and the appellate court, only the record.[98] In the interference context, however, the facts are exactly reversed. Only the district judge has the opportunity to take live testimony, and shackling his ability to base an opinion on his judgment as to the credibility of the witnesses he has seen and heard takes away from the district court review its best reason for being. For those courts to give any weight at all to the credibility judgments of the Patent Office tribunal is to stand

---

[96] 383 U.S. 1 (1966).

[97] 383 U.S. at 36.

[98] *Supra* note 94. See generally J. Moore, *Federal Practice*, Vol. 5 (2d ed. 1967), 52.04. Moore notes without comment the application of Rule 52 (a) to trials *de novo* under § 146 (Id. at ¶ 52.03 (3), at n. 9), but he also cites with approval the opinion of Judge Frank in Orvis v. Higgins, 180 F.2d 537 (2nd Cir. 1950), *cert. den.* 340 U.S. 810 (1950), wherein the judge stated that where a trial judge "decides a fact issue on written evidence alone, we are as able as he to determine credibility, and so we may disregard his finding." *Id.* at 539. (Moore's approval stated at ¶ 52.04, note 23 and accompanying text.)

Rule 52 (a) on its head! Again, as to technical findings, the presumption in favor of the Board's decision is proper; here the district courts are out of their element. But as to questions of conflicting testimony, or other questions of credibility, the court is better qualified than the Board of Patent interferences, both by the experience of the judge and the nature of the evidence, to make the decision. Deference to the Board in this context is most improper.

Evaluation of the Interference Proceeding

This discussion of interference practice suggests the inadequacies of the present system. Interferences can drag on for years, delaying the issuance of a patent and thereby clogging the distribution of new technology. They are costly to the parties, and this expense must be incurred before the invention has had time to repay its development costs, or even to show whether it ever will. For this reason, interferences must be a far greater burden on the small inventor, who has only one or a few inventions, and limited resources. The procedure itself is not well suited to the discovery of truth. Written testimony and the corroboration rule are both detrimental to the attainment of this goal; yet the latter's best excuse for being is the existence of the former:

> Unless an application steers with precision the tortuous channel amid the reefs and the shoals of the interference rules, it will be wrecked, regardless of the real merits of the case.[99]

Furthermore, the two sets of problems are impossible to cure simultaneously, at least without a great increase in the resources of the Patent Office Interference Division. A changeover to live testimony, which would meet the objections set out above, would dramatically increase both the cost to the parties and the delay. At the same time, any procedure for cutting the delay and cost would have to move in the opposite direction from that involving more live testimony. The conclusion to which one is forced is that the interference is impossible to fully reform. While in numbers it will not affect many applicants, on its own terms the verdict can not be favorable.[100]

---

[99] Hoar, *Patent Tactics and Law* (2d ed. 1950), p. 140.

[100] The fact that relatively small numbers of applications ever become involved in interferences is not a legitimate ground for defense, since the question at issue is how it functions when it *is* being utilized as a device for determining priority. In addition, a first-to-file alternative would operate to deprive a party of a patent only in an equally small number of cases, so that if the question at issue is broadened to a consideration of the overall effects of the two systems, arguments against

ENCOURAGEMENT OF INTERNATIONAL HARMONY

Introduction

The goal of bringing United States practice into harmony with that prevailing in other industrial nations must be regarded as increasingly crucial. Patents are territorially limited grants; their effects do not run beyond national borders. Commerce and communication however, are increasingly worldwide in scope, with the result that patent protection in only one country, even if it is the United States, is not sufficient if the invention is of wide applicability. Under present procedures then an inventor will file several applications, in the United States and in whatever foreign countries he contemplates making use of his invention. In each instance he will be dealing with a distinct national system with its own set of laws, rules, regulations and procedures. "These factors," in the words of the President's Commission:

> . . . increase the cost of securing multinational patent protection and often cloud the status of an invention in a particular country, thus discouraging foreign investment and marketing.[101]

Widespread recognition of these shortcomings of the present situation led the Commission to support the ultimate objective of a universal patent system:

> The Commission believes that the ultimate goal in the protection should be the establishment of a universal patent, respected throughout the world . . . and obtained quickly and inexpensively on a single application, but only in return for a genuine contribution to the progress of the useful arts.[102]

As a means to this end, the Commission stated the general rule that whenever harmonization of U.S. practice with prevailing foreign practice could be achieved without injury to the quality of the U.S. system, it should be done as a "first step" toward a universal system.[103] (Given the dominant technological position of the United States, no world patent system worthy of the name could not include the United States as well as the other industrial areas of Europe and Japan.)

The first-to-file proposal, according to its sponsors, is just such a step. Almost alone among all nations the U.S. adheres to the interference

---

the "race" nature of the first-to-file system must acknowledge that there will be even two runners in the race in only a small percentage of cases.

[101] *Report, supra* note 2, at 56.

[102] *Report, supra* note 2, Recommendation XXXV, at 56.

[103] *Report, supra* note 2, at 56.

method of determining priority.[104] Japan and all of the countries of Europe, both East and West, utilize the first-to-file rule as proposed by the Commission. The argument that adoption of the first-to-file rule in the U.S. patent system will help bring about a universal patent is necessarily vague, since it involves a prediction of future events not at all within the control of the United States. Nevertheless, there is a background of prior international cooperation in the form of concrete steps taken in the direction of uniformity and universality against which the present proposal must be viewed.

Prior International Developments

The first multinational effort promoting stable international expectations regarding the protection of "intellectual property" was the conclusion of the Paris Convention for the Protection of Industrial Property, signed in 1883 by all the major countries of Europe.[105] This Convention has been revised many times, as recently as 1958 in the Act of Lisbon, and its various forms have been acceded to by most of the major industrial nations of the world.[106] Its major function, to guarantee to the subjects of all contracting states rights equal to those provided its nationals by any other contracting state, is set out in Article 2:

> (1) Nationals of each of the countries of the Union shall as regards the protection of industrial property, enjoy in all the other countries of the Union the advantages that their respective laws now grant, or may hereafter grant, to nationals.

Article 2 has remained essentially unchanged for over eighty years, and its validity as a rule of international law is unchallenged.

Further steps toward the harmonization of national patent systems came after the Second World War, through the creation by the Council of Europe, soon after its own formation in May, 1949, of a Committee of Experts on Patents. This group studied the possibility

---

[104] Only Canada and the Philippines maintain a similar first-to-invent system. And a Royal Commission urged in 1960 that Canada switch to the first-to-file system. Mossinghoff, G. "Statement on the Report of the President's Commission," *IDEA*, Vol. 11 (Conference Number 1967), p. 71, 75.

[105] The term "intellectual property" is usually taken as encompassing patents, trade-marks, and copyrights. The narrower term, "industrial property," covers only patents and trade-marks.

[106] The United States joined the original Paris Convention in 1887 and acceded to the Act of Lisbon in 1962. The USSR and Japan acceded to the Act of Lisbon in 1965.

of the immediate establishment of a European patent system, a supranational law in force equally in all 18 member countries.[107] While supporting this as a desirable goal, the Committee finally concluded that the problems involved in the immediate creation of an all-Europe patent system were so complex that a more advisable and realistic approach would be to attempt a gradual harmonization of the patent laws of the several countries before any attempt was made to unite them into a single system.

> . . . [T]he substantive law of the different countries and the procedure in the countries with a preceding examination and countries with a mere system of registration without search for novelty and possiblity of industrial exploitation were so different that they must be approached before a common organisation could be aimed at.[108]

The approach suggested has led to substantial results among the members of the Council of Europe. A European Convention Relating to the Formalities Required for Patent Applications was signed and entered into force in the early 1950's.[109] By its terms, this treaty limits the power of a contracting state to control the form that a patent application is to take, while permitting the state to dispense with any of the requirements specified which it considers unnecessary.[110] The result of the treaty is that patent applications in all member states contain the same papers and are of the same form and dimensions.

A second Council of Europe treaty, this the Convention on the International Classification of Patents, entered into force in the middle of the last decade.[111] The central provision, contained in Article 1, is as follows:

> (1) Each Contracting Party shall adopt the system of classification of patents for inventions set out in the Annex hereto, together with any elaborations or modifications which shall have entered into force in accordance with paragraph 2 of Article 2.

---

[107] Members of the Council of Europe include: Austria, Belgium, Cyprus, Denmark, France, Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Sweden, Switzerland, Turkey, and the United Kingdom.

[108] von Holstein, "International Cooperation in the Field of Patent Law," *International and Comparative Law Quarterly*, Vol. 16 (1967), p. 191 at 199-200.

[109] 218 U.N.T.S. 27. All members of the Council of Europe except Austria, Cyprus, and Malta have adhered to the Convention. In addition Israel and South Africa have announced accession to it, pursuant to the terms of Article 9 (1).

[110] Article 1 (2).

[111] 218 U.N.T.S. 51. All Council of Europe members have adhered to the Convention except Austria, Cyprus, Greece, Iceland, Luxembourg, Malta, and Switzerland. In addition, Israel and Australia have acceded to it, pursuant to Article 5 (1).

The sense of this provision in terms of the present situation, even without a consideration of its effect on future harmonization, is beyond dispute. Literally hundreds of classes exist in all national patent systems, and since prior art includes foreign as well as domestic patents in most systems,[112] uniform classification schemes are of great help in conducting searches.

The other particularly noteworthy feature of the Classification Convention is the delegation by the contracting states of the power of future modification to the Committee of Experts. This is implicit in Article 1(1) and is made explicit in Article 2:

> (2) Any elaboration or modification approved by that Committee shall enter into force six months after all the Contracting Parties have been notified of such approval, unless at least two of the Parties have informed the Secretary-General of the Council of their objection.

Here for the first time in the field of international patent law independent states have surrendered a portion of their future autonomy to an international body.

The Council of Europe published in 1963 its most far-reaching harmonization measure, the Strasbourg Convention on the Unification of Certain Points of Substantive Law Concerning the Granting of Patents. The requisite conditions for the grant of a patent under the terms of this Convention are novelty, industrial applicability, and inventiveness,[113] a formula apparently identical to the U. S. tests of novelty, usefulness, and non-obviousness.[114] The significance of this proposed treaty can better be assessed after mention of similar development within the European Economic Community (EEC).

In November 1962 a committee appointed three years earlier by the member governments of the EEC[115] for the stated purposes of "harmonizing and unifying the legislation concerning Industrial Property in force in their respective States,"[116] released a Draft Convention. This comprehensive body of law generally tracks the proposed Council of Europe treaty (with the significant addition that a European Patent, valid to an extent in all member countries is provided for)

---

[112] See, in the U.S. system, 35 U.S.C. § 102 (a) & (b), exemplified in Monroe Auto Equipment Co. v. Heckethorn Mfg. Co., 332 F.2d 406, 416 (6th Cir. 1964), *cert. denied*, 379 U.S. 889 (1964).

[113] von Holstein, *supra* note 108, at 202.

[114] 35 U.S.C. §§ 101 & 103.

[115] The six members of the EEC, all members also of the Council of Europe, are Belgium, France, Federal Republic of Germany, Italy, Luxembourg, and Netherlands.

[116] Official introduction to the Draft Convention, printed in G. Oudemans, *The Draft European Patent Convention, a Commentary xxvi* (1963).

and clearly calls for a *first-to-file* system of priority determination.[117] The treatment given to this phase of the treaty by Oudemans, a distinguished Belgian patent attorney, in his Commentary, indicates that a first-to-file system was taken for granted as the uniformly accepted way of assigning priority.[118]

Since neither of these proposed treaties has been acted upon, probably as a result of the general stagnation brought about in all phases of European integration by the attitudes and actions of President de Gaulle of France, their provisions have not been tested. Nevertheless, they represent much work by the member countries, and they demonstrate that first-to-file priority determination is deeply intrenched in European patent law.

Recently activity toward an international patent has once more begun, this time within the framework of the permanent Secretariat of the Paris Union, BIRPI.[119] Over the last year and one half a Draft Patent Cooperation Treaty (PCT) has been written and submitted to a Committee of Experts for hearings and further studies.[120] In March, 1968, a meeting of the Working Group was held in Geneva to consider all phases of the PCT and its implementation.[121] The system proposed in the PCT is a mixture of the two approaches discussed above. Complete subordination of national patent laws to the international is not intended. What is intended is a centralized filing and search procedure culminating in the issuance of an "international certificate of patentability" which the contracting states could then choose to convert into a national patent.[122] The definition of prior art, contained in Article I of Annex 1 of the PCT reads almost word for word on the parallel section of the Reform Bill;[123] the "date of the international application" determines priority.

The Patent Cooperation Treaty represents a fresh attempt to create an international form of patent law. It differs from the draft developed by the Council of Europe and the EEC mainly in its broader base. The Paris Union, as noted above,[124] includes the United States,

[117] Articles 72-75. Oudemans, *supra* note 116, at 158-62.

[118] Oudemans, *supra* note 116, at 51-52.

[119] The Bureaux Internationaux pour la Protection de la Propriété Intellectuelle, based in Geneva, Switzerland.

[120] The Draft Treaty is printed in BIRPI Doc. PCT/1/4 (May 31, 1967); the first Report of the Committee of Experts at BIRPI Doc. PCT/1/11 (October 24, 1967).

[121] BIRPI Doc. PCT/11/2 (January 31, 1968).

[122] See Explanatory Memorandum, BIRPI Doc. PCT/1/3 (May 31, 1967) at 3-8.

[123] § 102, *supra* note 5, accompanying text.

[124] *Supra* note 106, accompanying text.

Japan, and the USSR, in addition to the countries of Europe. Unlike the other two proposals this draft is being prepared by a worldwide organization; the United States in fact was a prime mover in getting this effort moving.[125]

A U. S. changeover to the first-to-file system would obviously supply a great impetus to the deliberations now in progress on this treaty, for it would demonstrate to the rest of the world that there was more than the rhetoric of the President's Commission behind the United States' desire for harmonization. Continued adherence by this country to the interference method of determining priority would not only hurt the chances of the Patent Cooperation Treaty being adopted, but if it were adopted, would further complicate the status of American inventors.

In order to obtain the crucial international certificate, they would have to file their international application before any public disclosure was made. But their domestic patent application could be delayed as much as one year. This situation could and would lead to inadvertant dedications of inventions by American inventors, unaware of the differences between the United States and foreign rules.

In short the goal of international harmonization demands that the United States adopt some form of first-to-file system. It is not sufficient to say, as did former Commissioner Watson in commenting on the Commission's Recommendation, that the day of complete harmonization is far off, and that in any case the United States should not be any more willing to adopt a first-to-file system than the other countries of the world are to adopt our interference approach.[126]

In terms of numbers, the first-to-file countries represent the vast majority of the world's patent systems.[127] And as the above discussion has shown, the superiority of the interference system is certainly not overwhelmingly evident. A more realistic approach, it is submitted, would be to recognize that the influence which the United States could exert in support of an international patent system is substantial, but that it can not be brought to bear by an attitude of aloofness. Recognizing the commonality and the other benefits of the first-to-file concept, the United States could itself move toward international harmonization and also encourage other countries to do so, by adop-

---

[125] It was a resolution presented by the United States in 1966 which set off the current study. O'Brien, G., "A Realistic Appraisal of the Draft Patent Cooperation Treaty," *IDEA,* Vol. 11, No. 2 (Summer 1967), p. 159, at 168.

[126] Watson, R., "The Patent Reform Act of 1967," 49 *JPOS* 493,501-02 (1967).

[127] *Supra* note 104.

ting in its domestic system the first-to-file approach to priority determination.

CONSTITUTIONALITY OF FIRST-TO-FILE

Doubt has been raised occasionally as to the constitutionality of a statute granting a patent to the first person to file an application on an invention regardless of a prior conception or reduction to practice by another. This argument begins with the Patent Clause of the Constitution which provides in relevant part that the Congress shall have the power:

> . . . to promote the progress of . . . useful arts by securing for limited times to . . . inventors the exclusive right to their . . . discoveries.[128]

One detailed historical study of the English common law background concluded on the basis of eighteenth century meanings and usages that "the constitutional provision with respect to inventors implicitly requires a 'first and true' inventor."[129] On this basis, the argument is made that the Constitution requires that the patent be granted only to the earliest *inventor*, regardless of his junior status in filing. In other words, this position maintains that the interference proceeding fulfills a constitutionally essential function and may not be replaced therefore by reliance on the filing dates.

On the other hand, the author of the historical study just cited himself goes on to suggest that since the Constitutional mandate to Congress is given "to promote the progress of . . . useful art," and since the congressional choice to award the patent to the first person to file would not be an irrational one in view of that goal, the first-to-file system should be presumed constitutional.[130]

This conclusion seems correct. As the history of other clauses of the Constitution has shown, meanings can change over time and the content of a phrase two hundreds years ago is not necessarily the controlling factor in a modern interpretation. It has been repeated many times in many forms by the Supreme Court that:

> . . . the patent monopoly was not designed to secure the inventor his natural right in his discoveries. Rather it was a reward, an inducement, to bring forth new knowledge.[131]

---

[128] Article 1, § 8, Clause 8.

[129] Davidson, "The Constitutionality of the First-to-File System," *IDEA*, Vol. 11, No. 2 (Summer 1967), pp. 241, 250.

[130] Davidson, *supra* note 129, at 251-52.

[131] Graham v. John Deere Co., 383 U.S. 1, 9 (1966).

It is difficult to imagine therefore that the Court would strike down the first-to-file system which was proposed by a blue-ribbon Presidential Commission because, in the Commission's own words, it rewards the inventor:

> . . . who first appreciated the worth of the invention and promptly acted to make the invention available to the public.[132]

The Court would certainly hold that Congress possesses discretion to decide that a first-to-file system is the one best suited "to promote the progress of . . . useful arts."

In addition, there are statutory and case law rules now in effect which clearly depart from the "first and true" inventor standard, and these are of unquestioned constitutionality. Under the present statute a person may be awarded a patent on an invention even though before the applicant's own invention thereof:

> . . . the invention was made in this country by another who had . . . abandoned, suppressed, or concealed it.[133]

A typical example of the effect of this provision is seen in *Armour Pharmaceutical Co.* v. *Richardson-Merrell,*[134] where a withdrawn patent application was held not a bar to a later patent on the same invention. In cases where Section 102 (g) is involved, the patentee is never the first inventor; he is the first to publicly disclose it however, and on that basis he is awarded the patent.

Again, under the present statute, there are procedures which provide for the filing of an application by an assignee or other party having a "sufficient proprietary interest" in cases where the inventor either can not or will not apply himself[135] and for the issuance of a patent to the assignee.[136] While these provisions are merely a short-cut, removing the need for an equity action for specific performance, they are enacted as part of the Patent Laws, and as such do violence to the literal words of the Patent Clause. Their constitutionality, though it has never been directly upheld, must be considered certain, and this conclusion forms one more basis for believing in the constitutionality of the first-to-file system.

Finally, as noted above the concept of reduction to practice as explained in the case law requires the patentee to go beyond the "complete performance of the mental part of the inventive act"

---

[132] *Report, supra* note 2, at 6.
[133] 35 U.S.C. § 102 (g).
[134] 264 F.Supp 1013, 1016-17 (D. Del. 1967).
[135] 35 U.S.C. § 118. See also Rule 47.
[136] 35 U.S.C. § 152. See also Rule 334.

although all that remains to be done once the mental act has been performed "belongs to the department of *construction, not invention.*" (Emphasis added.) [137] And as was demonstrated above in the example involving X, Y, and Z,[138] the diligence rule together with the concepts of conception and reduction to practice means that Z, whose "complete performance of the mental part of the inventive act" did not occur until long after X's will have a superior claim to the patent, so long as he began his diligent path along the way to construction immediately. In truth, the present system does not reward the first inventor, but rather the "first diligent inventor who reduces to practice."[139]

The conclusion must be reached that any risk of constitutional barriers blocking a switch to a first-to-file system is negligible.

Conclusion

The survey just completed leads to several conclusions. All three of the Commission's stated objectives would be accomplished by the adoption of the proposed first-to-file system: disclosure of new technology to the public would be speeded, the interference would be done away with, and international harmony in the priority area of patent law would be achieved, with an impetus given thereby to harmony in other areas also. The new problems which the proposed first-to-file system would introduce are not all insignificant however. The preliminary application procedure particularly would prove to be unwieldly and almost unworkable. But even this bottleneck could be eased if the preliminary application procedure were dropped from the proposal.

This would leave a pure first-to-file system, one in which the first filing of a *complete* application conclusively determined priority. Such a pure first-to-file system would in fact be closer to the standard used in the other countries of the world, where no preliminary application exists. Clear cases of inequitable results could be imagined under this system, but as the X, Y, Z discussion above demonstrated, they are just as possible under the present interference system.

Granting the patent to the winner of the race to the Patent Office is not inherently less just than awarding it to the party prevailing in an interference. Many factors having no innate moral weight will determine the winner under either procedure.[140] And the warnings

[137] Townsend v. Smith, *supra* note 39.

[138] *Supra* text p. 954.

[139] Rabinow, J., "The Anti-Inventor Report of the President's Commission," *IDEA*, Vol. 11, No. 1 (Spring 1967), p. 47, 52.

[140] *Report, supra* note 2, at 6. See *supra* note 99, accompanying text.

ominously sounded by many to the effect that a first-to-file system would harm the relative position of the independent inventor are of questionable validity. For who is more likely to be trapped by the rigid rules which govern the interference proceeding (particularly the corroboration requirement), the corporate inventor, supervised and counseled by staff attorneys, or the sole inventor, working by himself, without any idea that to verify his work in court he will need independent verification of every element of his invention and every phase of his work? The interference proceeding, it is submitted, both by its cost and by its own substantive rules, greatly favors the corporate inventor. A first-to-file system would correct this imbalance.

It is for all the reasons mentioned in this paper that S. 1042 Substitute, introduced in May, 1968, by Senator John L. McClellan, is a disappointment. The substitute bill provides basically for a continuation of the present interference method of priority determination, with all the deficiencies which that system contains. An attempt is made to limit the number of cases in which an interference will be declared, by requiring the junior party to present evidence sufficient to support a *prima facie* case of priority of invention.[141] The result of this requirement will be fewer interferences, but at what cost? Streamlining the interference procedures in this way will not result in any better decisions in the cases tried, and more importantly, this provision in no way moves to meet and correct the various inherent deficiencies of the interference discussed earlier in this paper. A wiser approach would be to take the step that is large, but needs to be taken, and adopt some form of a first-to-file system, either the strict type or the modified kind, discussed in the following paragraphs.

To allow the present practice of pre-filing testing to continue, under a first-to-file system some form of grace period should be allowed. The approximately 100,000 filings per year saved by this kind of grace period represent an enormous saving to the Patent Office, and the relatively short resulting delay in disclosure is not an evil sufficient to balance it. Allowance of the grace period in turn requires qualifications to the conclusive nature of the filing date of the complete application. The question of independent inventorship could certainly be raised by the later applicant, whether or not he had tested the invention publicly.[142] However, while this situation is relatively simple, a related one is more complicated.

---

[141] S.1042 Substitute § 193 (a).

[142] See *supra* note 19, accompanying text.

Specifically, what should be the result if another party, who had independently developed the same invention, submitted his application to the Patent Office after the commencement of public testing by the first party? The question of independent invention would not be at issue in this context; independent invention is conceded. The question is rather whether public use is to be given some legal significance. To require the parties to prove their dates of invention would be to return to the interference. That solution is unacceptable. To rely strictly on the filing date would be to curtail severely the utility of the grace period. Given the fact that the elimination of the grace period would lead to a roughly 100 percent increase in the number of applications filed,[143] this solution if possible should be avoided.

Perhaps the best response would be a compromise, allowing an applicant who has made public use of his invention before filing to adopt the date of the initial use as a "constructive filing date" for the purposes of priority rights. This would allow him to defeat the priority claim of another inventor who chose to file without testing, but who filed after the initiation of public use by the first party. Problems of proof should be minimal in such contests, in sharp contrast to interference proceedings, since by definition the facts surrounding the first public use would be accessible and not within the exclusive control of one party. Further, such a procedure encourages pre-filing testing, and this as Sanders' research has shown, reduces greatly and without cost to the public[144] the workload of the Patent Office.

The proposal which results is for a first-to-file system, with two qualifications. A junior party could always raise the question of independent inventorship, and a junior party who publicly used the invention before filing on it could take as his constructive date of filing the date on which that use began. These two exceptions would not destroy the essential first-to-file system, since they would come into play in only a very small number of cases, and the overall international result would still therefore be one of harmony. Domestically the interference would be abolished, yet the grace period still preserved. And the speed with which new technology is brought to the public would be dramatically increased.[145] Such a priority system, it is submitted, would achieve the three worthy goals set by the President's Commission, and would be completely workable.

---

[143] *Supra* note 10, and accompanying text.

[144] There is no cost to the public since the inventions not filed are those found after testing to be uncommercial.

[145] *Supra* pp. 948-949.

REVIEWS AND ANNOTATIONS

Recently Published or Reported Material Relating to the Research Institute's Work

Books

Forman, Howard I., Editor, *The Law of Chemical, Metallurgical and Pharmaceutical Patents,* assisted by Joseph Gray Jackson, Joseph Rossman and Virgil E. Woodcock, New York: Central Book Company, Inc., 1967, 863 pp. $35.00.

The subject of this review is an excellent compilation of a series of 17 papers delivered in 1964 at the Arvid E. Lyden Memorial Lectures, jointly sponsored by The Engineers' Club of Philadelphia and the Philadelphia Patent Law Association. The papers were intended primarily for presentation to patent practitioners. However, there is much of value in this text for any person having either a direct or indirect interest in the United States patent system. The prepared materials are supplemented by an exchange of information between the speakers and those attending the lectures. The resulting dialogue, as reported in this publication, seems to me to add an interesting contemporary flavor and to underscore the immediate pertinence to the materials presented, as well as reflecting a healthy audience participation.

The high quality of the editorial work is reflected in the exemplary organization of the text. It is divided into five parts, each with appropriate introductory materials. The accompanying appendices, the table of cases, and the excellent index make all the materials readily available. In total, the volume is a most valuable tool for use by all who have an interest in learning more about our patent laws.

It has been my good fortune to have been active as a patent lawyer and as a judge during the same time that the editors of this book and the individual contributors have enriched the literature of the patent law with their many timely contributions in addition to those currently under consideration. As scholars and advocates they pursued their studies and writings through the difficult investigative days of the depression years, and later played significant roles in the revisions of the patent statutes culminating in the

Patent Act of 1952. As a group, they have consistently enriched our profession by their perceptive insights into problem areas of the patent law and in sharing these insights with all of us.

The range of the present text is much broader than is suggested by its title. While the title reflects the direct concern of the lectures, a wealth of information was presented which is of value to all patent lawyers. A general idea of the range of these materials will be apparent as one considers the content of the several parts of the book.

Part I is entitled "The Patentable Invention." The first chapter deals in three parts with the basic philosophy of the American patent system. In a general presentation, Helge Holst, Chairman of the Board of the American Tool and Machine Company, discusses patents and their contribution to the economy. He points out that continuing growth of the labor force and automation create a need for new work opportunities. A principal source of such opportunities, he thinks, lies in the development of new products, and in the improvement of existing lines of goods and services. He urges that government patent and data policies be reviewed to minimize the obstacles to non-governmental use of data and technology emanating from work done for the government.

Charles C. Price, Professor of Chemistry at the University of Pennsylvania, concentrates his philosophical attentions on the chemical industry. The objective of that industry in our society, he points out, must be to provide chemical products or processes which meet new or old human needs or improve on existing processes or products. Dr. Price emphasizes that one of the key and troublesome aspects of patentable discovery is the factor of predictability, which equates with obviousness, and which he illustrates with several examples. In substance, his attack is on hindsight reconstruction of the prior art. The objectivity in this presentation is evidenced by Dr. Price's discussion of certain policies and practices of government, industry, and the Patent Office which pose problems for the patent system.

Concluding the philosophical foundation for the text materials, John T. Connor, President, Allied Chemical Corporation, and former Secretary of Commerce, delivered a paper which he and I. Louis Wolk, Director of Patents for Merck & Co., prepared dealing with the role of patents in pharmaceutical innovation. I recommend this presentation to those who have an interest in the particular problems in this area.

Still dealing with "The Patentable Invention," Chapter 2

presents the scholarly views of P. J. Federico, Examiner-in-Chief of the Patent Office, dealing with the subject matter for patents as specified in 35 U. S. C. 101. He observes that this section is one of the most important sections of the patent law in that it establishes the basic right of an inventor to obtain a patent for his invention and delineates rather broadly the subject matter capable of being patented. From its historical origins to its contemporary interpretation, Mr. Federico thoroughly dissects and analyzes this section.

Chapter 3 terminates the discussion of "The Patentable Invention" with its inclusion of Virgil E. Woodcock's paper, "What is Prior Art," one of the very significant recent contributions to patent literature here presented in its updated revision. This paper thoroughly analyzes Sections 102 and 103 of the Patent Act, and presents selected illustrative fact situations as well as the historical developments relating to this ever troublesome problem. This paper should be mandatory reading for all those who would practice patent law.

Part II of the book is entitled "Securing Patent Protection" and starts with Chapter 4, "Unobviousness (Section 103): A Requirement for Patentability" by George Frost, Director, Patent Section, General Motors Corporation. While this paper logically belongs in Part I, its careful analysis of the case law dealing with the application of 35 U. S. C. 103, particularly as applied to chemical inventions makes it an appropriate "lead off" for Part II and emphasizes the importance of the subject. It contains a helpful historical review of some cases arising under Section 103 and discusses the decisions in *In re Papesch* and in the *Eibel Process* cases.

Chapter 5, by George J. Harding, III, deals with "Steps Preliminary to Filing a Patent Application." It covers such diverse topics as the prior art search, proof of conception, and requirements for a reduction to practice and diligence. In substance, it deals with those activities prior to the filing of the application for a patent.

Chapter 6 should be of utmost interest to the patent law practitioner for its treatment of "Preparing the Application (Specification)" by Joseph Gray Jackson, a truly outstanding scholar of patent law. The various requirements of all applications are first discussed, with later emphasis given to the special requirements for chemical, metallurgical and pharmaceutical cases. Those who "read and heed" this chapter will be doing a service to their clients and will materially advance the cause of the patent law.

C. Harold Herr's contribution follows logically with a discussion of "Preparing the Application (Claims)." The importance of the claims to the worth of a patent makes Chapter 7 particularly valuable in its discussion of the pitfalls in claim drafting, particularly in the chemical, metallurgical and pharmaceutical fields. Of special interest is the listing on page 375 of additional references for selective reading on chemical claims.

Having discussed the preparation of the application and the claims, it is fitting to follow with Isaac G. Stone's contribution of Chapter 8, entitled "Prosecuting the Application." There, Mr. Stone discusses the rules for chemical practice, prosecution before the Examiner, and appeals to the Board of Appeals. This chapter is especially valuable for its brief treatment of a number of the problems with which an advocate may be confronted during prosecution of the application.

Chapter 9, Part 1, by Maurice A. Crews and the late Floyd H. Crews discusses the controversial topics of interference law and practice, especially as they relate to chemical interferences. The substantive legal aspects of interference law and the special problems of proof and the procedural rules are well stated. It is a meritorious contribution in a perplexing and often confusing area of the patent law. Part 2 of this chapter, by George W. Boys, Chairman of the Board of Interferences, deals with the changes in interference practice and, as such, adds a timely and valuable contribution to the practice.

Part III of the book is entitled "Using the Patent." It includes Chapters 10 through 12, dealing respectively with Howard I. Forman's "Exercise of Rights Under Patents"; John Hoxie's "Enforcement of Patent Rights," and S. Delvalle Goldsmith's "General Nature of Foreign Patent Rights."

Dr. Forman's attention is primarily concentrated on assignments and licenses of inventions, with special attention given to the special problems of chemical inventions. Mr. Hoxie's paper gives the reader much valuable material in the carefully selected and well written comments of one who has practiced patent law for many years without abandoning the role of the true scholar. Mr. Goldsmith's paper contains much valuable and otherwise hard to find information as to foreign patent problems arising in the specialized area of present concern.

Part IV consists of Chapter 13 which is directed into three parts and presents some "Special Problems in Protecting Chemical Inventions." Part 1, by C. Marshall

Dann, provides timely comments upon the *Manson* decision and upon terminal disclaimer practice. Harry Goldsmith, in Part 2, discusses the very special problem of utility requirements for pharmaceutical inventions and presents much material for serious consideration in this area. Part 3, by J. Howard Joynt, is confined to metallurgical cases.

While several timely topics are the subject of repeated discussions, the divergent views expressed suggest the many approaches which must be taken when dealing with contemporary patent law problems. Such discussions emphasize the importance of scholarly participation in the continuing debate which today plays such a large part in the business of being an informed patent lawyer. Portions of this book are indeed thought provoking and point the way to future progress in the areas discussed. In this respect, also, the text is to be admired. In the vernacular of the chemist, it is a catalyst of such perfection that it will not be readily contaminated by the random excursions of those who would challenge the basic premises of our patent system or criticize patent lawyers as "reactionaries opposed to change."

Considering the nature of the book, and its wide range of topics and viewpoints, it is a necessary addition to the library of any patent lawyer concerned with an analysis in depth of many of the current problems in patent law.

Despite what at times may seem to be a high price for patent text materials, it is a known fact that few authors or publishers of such materials gain very little other than the satisfaction of providing a needed public service. For its willingness to undertake publication of this volume under these circumstances, I salute the Central Book Company. In the present instance, it also should be noted that the royalties from this book are payable to the Philadelphia Patent Law Association for use in its educational and public relations activities. "The First Civilized American," as one author characterized Benjamin Franklin, would, I am sure, have heartily approved this project.

Arthur M. Smith

Periodicals

Annual Antitrust Symposium of the Illinois State Bar Association and the Chicago Bar Association Featuring 'What's New in Distribution, Franchising and Licensing.' What's New in the Antitrust Aspects of Selecting and Terminating Distributors, J. A. Groenke; Marketing Limitations on Independent Distributors and Dealers, Prices, Territories,

Customers, and Handling of Competitive Products, R. W. McLaren; Alternative Distribution Techniques-Franchising, Consignment Agency, and Licensing, R. C. Keck; Overseas Distribution, Franchising, and Licensing—Comparison with Domestic Techniques, J. A. Rahl; Antitrust in Galbraith's New Industrial State, J. L. Alioto, M. M. Blecher. *Antitrust Bulletin,* Vol. 13 (Spring 1968), p. 129.

Adelman, Martin J., "Trade Secrets and Federal Pre-emption—The Aftermath of Sears and Compco," *Journal of the Patent Office Society,* Vol. 49, No. 10 (October 1967), p. 713, at 715-16.

"It is the central thesis of this paper that the law of trade secrets should not be applied to protect any invention in commercial use which can be maintained in secret indefinitely if it is not the subject of a pending patent application. Hence, it would follow that if an inventor chooses to leave a potentially protectable invention unprotected by a patent, he must take the chance that his invention can lawfully be used, even by those who received their knowledge of the invention in confidence, if the invention is in commercial use. It follows from this thesis that if the invention is not in commercial use the law of trade secrets remains unimpaired. It further follows that all classes of trade secrets for which patent protection may not be sought remain protectable by the law of trade secrets. Finally it follows that secrets which are the subject of patent applications may be protected by the law of trade secrets."

Armengaud, A. and G. Houssard, Beau de Lomenie, "New French Law on Trademarks and Service Marks," *Journal of the Patent Office Society,* Vol. 50, No. 1 (January 1968), p. 60.

"The new law became operative on August 1st, 1965 and substituted for the former French law of 1857. The main modifications brought to the former legislation are the [presented]."

Arrigucci, Mario, "Trademarks in Italy," *The Trademark Reporter,* Vol. 58, No. 5 (May 1968), p. 334.

"But since companies in the United States usually have their United States experts frame their trademark policy in foreign countries, and since I am today talking to you as such experts, I have selected some of the most frequent and most debated points of Italian practice, which could affect your clients' trademark rights in my country. . . .

"Inasmuch as Italy is an outstanding example of the group of so-called 'registration countries,'

the following discussion will cover problems which might be encountered in other countries belonging to the same group and having the same juridical structure."

Backman, Jules, "The Role of Trademarks in Our Competitive Economy," *The Trademark Reporter,* Vol. 58, No. 4 (April 1968), p. 219 at 229.

"The charge that large 'monopoly rewards' accompany intensive advertising receives no support from these data. And this is not surprising. Intensive advertising assures no permanent advantages to the advertiser. The position at the top is precarious, not secure. Competitive pressures are constantly eroding the position of leading brands despite continued large-scale expenditures for advertising. That this development is not accompanied by a marked differential in profit rates is to be expected. The investment in advertising appears to yield a modest return in light of the risks of failure assumed.

"To meet the needs of our dynamic competitive economy, a company's marketing posture must be kept flexible. Advertising is only one alternative in the marketing mix. There are other techniques available to build up sales. These include: packaging, personal selling, pricing, alternative channels of distribution, and promotions. Trademarks are an integral part of this mix."

Bernhard, R. C., "Competition in Law and Economics," *Antitrust Bulletin,* Vol. 12 (Winter 1967), p. 1099.

Bones, Glenn, "The Terminal Disclaimer and Double Patenting," *Journal of the Patent Office Society,* Vol. 49, No. 12 (December 1967), p. 864 at 875-6.

"The Patent Reform Bill advocates the elimination of the overcoming of a holding of double patenting by the filing of a terminal disclaimer despite the delay which will occur in the issuance of some patents and despite the inequities which fall on some applicants due to an unintended 'dedication' of pending subject matter. On the other hand, the ABA position seems to encourage the issuance of two or more patents for the 'same invention' even if the inventions claimed in the two or more patents are merely 'colorable variations' of one another. Neither of these positions appears to be completely satisfactory, although from the standpoint of equity and prosecution in the Patent Office the position of the Patent Reform Bill appears to be decidedly inferior to the approach of the ABA Bills."

Bodner, J., Jr., "Antitrust Restrictions on Trade Association Mem-

bership and Participation," *American Bar Association Journal,* Vol. 54 (January 1968), p. 27.

Browing, D. S., "International Licensing Agreements: Some Legal and Economic Considerations," *Houston Law Review,* Vol. 5 (Fall 1967), p. 63.

Campbell, R. P., "Increasing Profits From Foreign Know-How Licensing," *Denver Law Journal,* Vol. 45 (Winter 1968), p. 31.

Chope, H. Roy, "Conflicts Between Patents and the Antitrust Laws," *Journal of the Patent Office Society,* Vol. 49, No. 11 (November 1967), p. 819 at 820.

"1. Present-day judicial attitudes and recent court cases tend to penalize the successful growing company if the company wishes to use patents as a means for protecting the results of its research and development.

"2. The patent system today really must be viewed as a 'subsystem' immersed in a much larger system of government attitudes and practices.

"3. If our government really feels that the patent system should play an important role in our economy, there should be an effort on the part of the government to resolve the conflicts between antitrust viewpoints and the practice of patents.

"4. Businessmen must continue to emphasize not only the positive aspects of our patent system, but our profit-oriented free enterprise system as well."

"Civil Procedure—Patent Attorneys—Only Documents Prepared During Pendency of Litigation Held Within Protection of Attorney-Client Privilege," *New York University Law Review,* Vol. 42 (December 1967), p. 1176.

Clark, T. C., "To Promote the Progress of . . . Useful Arts," *New York University Law Review,* Vol. 43 (March 1968), p. 88.

Cohn, R., "Letter from Israel," *Trademark Reporter,* Vol. 58, No. 2 (February 1968), p. 47.

"Community Antenna Television Operations as a 'Performance'—An Application of the Principle of Semantic Extension to the Federal Copyright Act," *North Dakota Law Review,* Vol. 44 (Fall 1967), p. 17.

"Computer Programs and Proposed Revisions of the Patent and Copyright Laws," *Harvard Law Review,* Vol. 81 (May 1968), p. 1541.

"Computer Programs: Should They Be Patentable?" *Columbia Law Review,* Vol. 68 (February 1968), p. 241.

Copyright Law Revision—A Symposium. Foreword: Copyright Problems—Twenty-First Century Style, R. F. Dole, Jr.; Copyright Duration, J. S. Dubin; Fair Use and the Revision of the Copy-

right Act, J. Schulman; Sound Recordings and the Copyright Revision, S. A. Diamond; Copyright Revision-Music: CATV Educational Broadcasting and Jukeboxes, H. Finkelstein; Educational Television—A Non-Commercial Viewpoint, E. N. Aleinikoff, *Iowa Law Review,* Vol. 53 (February 1968), p. 805.

"Copyright — Pre-Emption — The Character Paladin Is a Writing Within the Copyright Clause and May be Freely Copied Since Congress Has Not Protected It," *New York University Law Review,* Vol. 43 (March 1968), p. 178.

"Copyright Protection for Architectural Structures," *University of San Francisco Law Review,* Vol. 2 (April 1968), p. 320.

Copyright Symposium of the American Bar Association—Computers and Copyright: The New Technology and Revision of the Old Law. Introduction, M. D. Goldberg; Commentary on Access to Copyrighted Materials by Information Storage and Retrieval Systems, E. G. Perle; Comments on the Copyright Aspects of Automatic Information Storage and Retrieval Systems, H. F. Hamann; The Computer and Copyright; The Next Five Years, C. H. Lieb; Computers and Copyright: A Third Area, J. F. Horty; S.2216 To Establish the National Commission on New Technological Uses of Copyrighted Works, T. C. Brennan, *Bulletin of the Copyright Society of the U.S.A.,* Vol. 15 (October 1967), p. 1.

Cowan, A. H., "Copyright: An Introduction for the General Practioner," *New York State Bar Journal,* Vol. 40 (February 1968), p. 116.

"Demise of *Res Judicata* in *Ex Parte* Patent Office Practice," *Notre Dame Lawyer,* Vol. 43 (December 1967), p. 214.

Dobkin, J. A., "Arbitrability of Patent Disputes Under the U. S. Arbitration Act," *Arbitration Journal,* Vol. 23 (1968), p. 1.

Doctors, S. T., "Transfer of Space Technology to the American Consumer: The Effect of NASA's Patent Policy," *Minnesota Law Review,* Vol. 52 (March 1968), p. 789.

Dresser, James N., "Joint Action in Patent Licensing Negotiations," *Journal of the Patent Office Society,* Vol. 50, No. 4 (April 1968), p. 231 at 232.

"The patent laws permit limited monopolies; the antitrust laws in general prohibit monopolies. The interrelationship of these two sets of laws has resulted in many lengthy legal battles. Numerous questions regarding this interrelationship have already been answered in the courts, but many questions remain. It is the

purpose of this paper to inspect the legality of joint action by a group of patentees or by a group of potential licensees either in negotiating or in refusing to negotiate patent licenses."

Dvorak, Joseph J., "That Perplexing Problem—The Doctrine of File Wrapper Estoppel," *Journal of the Patent Office Society,* Vol. 50, No. 3 (March 1968), p. 143.

"Different philosophical approaches of the federal judges toward our patent system may contribute in part to the difficulty encountered in understanding the doctrine. However, of no less importance in contributing to the confusion are the attempts made by the federal judiciary to place the doctrine of file wrapper estoppel in terms analogous to other legal principles, such as, contract or administrative law. The purpose of this article is, first, to demonstrate that the doctrine of file wrapper estoppel has no real counterpart in other legal fields and, second, to reconsider the reasons on which this doctrine rests."

Edgerton, William H., Ph.D., "Patent Protection for Pharmaceutical Products in the U.S.S.R.," *Journal of the Patent Office Society,* Vol. 49, 12 (December 1967) p. 835, at 840.

". . . protection for pharmaceutical products in the U.S.S.R. is limited in scope but not in subject matter with expected compensation uncertain and not much in excess of the overall expenses of prosecution in the case of certificates of authorship. Issued patents and/or certificates of authorship coupled with know-how, however, may be an important basis for negotiation of license arrangements through V/O Licensintorg acting as agents for the Soviet Ministry of Health or for import of the commercial product forms into the U.S.S.R. through V/O Medexport."

"Electronic Plagiarism – The Display of Copyrighted Articles on Television," *Georgetown Law Journal,* Vol. 56 (December 1967), p. 360.

Evans, G. A., "Some Essentials of Patent Licensing," *Wisconsin Bar Bulletin,* Vol. 40 (December 1967), p. 39.

Forman, Howard I., "Government Patent Policy—Yesterday, Today and Tomorrow," *Journal of the Patent Office Society,* Vol. 50, No. 1 (January 1968), p. 32 at pp. 41-42.

"The President's policy is not the complete solution to the problem, for other reasons. There are 14 statutes that need to be amended in order to permit that policy to be applicable to the agencies which they govern. Ten of them were enacted prior to the President's Memo in 1963, and

four since then. Each of these statutes calls for dedication of the inventions to the public or assignment to the Government. Eight of them, incidentally, were brought about by passage of the so-called Long Amendment—introduced by Senator Russell Long of Louisiana, who is the avowed leader of the effort to prevent the contractors from ever being given title to inventions made in the performance of Government contracts in almost every situation. Two such amendments were additionally submitted by Senator Long in 1965, but both failed of passage. The Senate indicated that it had turned down the amendments in order to permit resolution of the Government's patent policy on a comprehensive basis rather than on a piecemeal basis."

Forman, H. I., "Retrospections and Introspections Concerning Patents and Government Patent Policy," *Journal of the Patent Office Society,* Vol. 49, No. 9 (September 1967), p. 678.

"Fraudulent Concealment as Tolling the Antitrust Statute of Limitations," *Fordham Law Review,* Vol. 36 (December 1967), p. 328.

Fromson, D., "Safeguarding of Trade Secrets," *New York State Bar Journal,* Vol. 40 (January 1968), p. 53.

Fulda, C. H., "Exclusive Distributor and the Antitrust Laws of the Common Market of Europe and the United States," *Texas International Law Forum,* Vol. 3 (Summer 1967), p. 209.

Goldsmith, Harry, "The ABC of PCT (Patent Cooperation Treaty), *Journal of the Patent Office Society,* Vol. 49, No. 12 (December 1967), p. 877, at 877 and 889.

"What is the aim of PCT? It 'is to facilitate the filing and examination of applications for the protection of the same invention in a number of countries,' with the further objects of saving work, time and money primarily for the applicant, and with a minimum of administrative cost and effort by the national patent offices; in short, to reduce the duplication of effort both for applicants and patent offices."

". . . The promulgation of the proposed PCT is, of course, not the end of the road. However, many regard it as representing substantial progress and as a framework within which the farther reaching universal patent concepts can be built. PCT adopts the very practical policy of going after first those problems which are considered by the users of the patent system to be most important, while at the same time avoiding major encroachment on national sovereignties."

Goldsmith, Harry, "Why Not a First-to-File System?" *Journal of the Patent Office Society,* Vol. 49, No. 10 (October 1967), pp. 699, 700.

"It is interesting to note that various patent law associations, including the American Patent Law Association, the Patent Section of the American Bar Association and the Patent Committee of the National Association of Manufacturers have indicated their disapproval of the first-to-file system.

"In view of the controversial aspects of this provision, it may be interesting to examine what the situation is under our present patent law and how far away we may be from, or conversely, how near we may already be to a first-to-file system. And what about the dire prediction of disaster made by opponents if such a system is introduced—are they based on fact or fancy?"

Gorn, E. J., "Why Patents and Data Rights?" *Federal Bar Journal,* Vol. 28 (Winter 1968), p. 59.

Greenbaum, A. J., "Computers, Copyrights and the Law Prior to Revision," *Bulletin of the Copyright Society of the U.S.A.,* Vol. 15 (February 1968), p. 164.

Greenberg, Alan G., "Unclean Hands as a Defense to Patent Infringement," *Journal of the Patent Office Society,* Vol. 50, No. 1 (January 1968), p. 12 at p. 13.

"There are several elements in the traditional unclean hands defense which must be present before the court will dismiss the suit for want of equity. These are:

1) that the plaintiff must have unclean hands;
2) that the plaintiff's unclean hands must have harmed the defendant;
3) that the plaintiff need not lead a blameless life but that his conduct, as asserted, must be related to the subject matter of the litigation;
4) that the plaintiff's conduct constituting unclean hands should have been willful conduct; and
5) that his hands must remain clean throughout the litigation to the final decree.

"How have these requirements been applied by the courts in the patent area?"

Groeger, Theodore, "Burdensome Convention Period," *Journal of the Patent Office Society,* Vol. 50. No. 2 (February 1968), p. 71.

"The 12 month period mentioned therein ("convention period") has not been challenged successfully in the 84 year lifespan of the Convention. Although it seemed to be a sufficient period of time in the beginning it nowadays more and

more troubles the inventors and their assignees, since that 'time can be much too short.' "

Handler, M., "Twentieth Annual Antitrust Review," *Record of the Association of the Bar of the City of New York,* Vol. 22 (December 1967), p. 669; *Virginia Law Review,* Vol. 53 (December 1967), p. 1667.

Hauptman, Gunter A., "Non-Analogous Art and New Uses," *Journal of the Patent Office Society,* Vol. 50, No. 4 (April 1968), p. 214 at p. 230.

"With a few exceptions, subject matter known in one field may be patented in another field if the claimed subject matter falls within a statutory class and if there is a structural change and an unexpected or non-obvious result attributable to the structural change. The few cases with holdings not easily fitting these basic patent principles may possibly be explained as consistent with the principles on their facts and not requiring the strong language used in the decisions.

"The exact characterization of fact situations as 'analogous/non-analogous,' 'new use,' 'latent properties' or 'substitution' seems to make no difference—the basic patent principles always apply."

Henderson, G. F., "Problems Involved in the Assignment of Patents and Patent Rights," *Ottawa Law Review,* Vol. 1 (1966), p. 36.

Hoeth, L. W., "Letter from the Netherlands," *Trademark Reporter,* Vol. 58, No. 1 (January 1968), p. 31.

Hoffman, J. E., "Jurisdiction of the Department of Agriculture Over Deceptive Trademarks," *Trademark Reporter,* Vol. 57, No. 12 (December 1967), p. 833.

Honig, F., "Letter from Great Britain," *Trademark Reporter,* Vol. 58, No. 2 (February 1968), p. 107.

"Implied Warranties in Patent Know-how and Technical Assistance Licensing Agreements," *California Law Review,* Vol. 56 (January 1968), p. 168.

"In Commemoration of the Fiftieth Anniversary of the Patent Office Society," *Journal of the Patent Office Society,* Vol. 49, No. 10 (October 1967), p. 757.

"Industrial Protection of Preproduction Disclosures," *Dickinson Law Review,* Vol. 72 (Fall 1967), p. 160.

International Business Transactions Symposium: The Transfer of Technology in Trans-National Business. Introduction: The Foreign Joint Venture Corporation: Some Legal and Business Considerations, W. R. Ross; Conflict Avoidance Through Choice of Law and Forum, C. H. Peterson; Increasing Profits from Foreign

Know-How Licensing, R. P. Campbell; Agreements for the Transmission of Technology Abroad: The Distributor Relationship, J. A. Moore; Patent Protection in International Business Transactions, C. H. Wayman, *Denver Law Journal,* Vol. 45 (Winter 1968), p. 1.

"International Law—Federal Courts—Pendent Jurisdiction—Federal Courts Have Discretionary Power to Permit Joinder of United States and Foreign Patent Claims," *Texas International Law Forum,* Vol. 3 (Summer 1967), p. 370.

Jarkovsky, Isaac, "A Comparative Review of Japanese and U.S. Patent and Related Laws," *Journal of the Patent Office Society,* Vol. 50, No. 2 (February 1968), p. 76 at 77.

" . . . from a viewpoint of the U.S. practitioner, for a survey of analogies as well as basic differences between the Japanese and U.S. Codes. This, in turn, will serve to point up the type of protection that can or cannot be secured in Japan, the tools available for securing this protection, the peculiarities of Japanese practice, and the implications inherent in protection from the viewpoints of infringement and the Japanese antitrust laws. The present paper will attempt to fill this gap and will also briefly review the Japanese export control procedures since it has direct relevancy to, among others, U.S. interests."

Jackson, Joseph Gray, "Interferences Pro and Con," *Journal of the Patent Office Society,* Vol. 50, No. 1 (January 1968), p. 3 at p. 11.

"It seems that the Commission thinks the Patent Office has a leaky roof and proposes various remedies for these leaks. I would think that the practical answer is to examine each of the proposals, decide whether there is a problem or a leak, and if so, whether the bucket, kettle or pan is of the proper size to deal with it."

Jansky, J., "Choice of Law and Trademark License Agreements," *Trademark Reporter,* Vol. 58, No. 1 (January 1968), p. 13.

"Jurisdiction – Foreign Patents – Jurisdiction Over Foreign Patent Claims," *Michigan Law Review,* Vol. 66 (December 1968), p. 358.

Kaminstein, A. L. "Statement by the Register for the United States Delegation at Geneva," *Bulletin of the Copyright Society of the U.S.A.,* Vol. 15 (February 1968), p. 157.

Kelleher, G. W., "Common Market Antitrust Laws: The First Ten Years," *Antitrust Bulletin,* Vol. 12 (Winter 1967), p. 1219.

Kempf, Robert F., "Reduction to

Practice of Space Inventions," *Journal of the Patent Office Society,* Vol. 50, No. 2 (February 1968), p. 105.

"To show that an invention worked as intended in its practical contemplated use, a complete operative embodiment must be constructed and subjected to some degree of testing; and depending on the circumstances this testing may be under conditions of actual use; in a simulated environment which duplicates the essential conditions of actual use, or in some instances it may be bench testing which does not simulate all the conditions of actual use. The type and degree of testing necessary to show reduction to practice is discussed, with emphasis on inventions intended to be used in a space environment.

"Consideration is also given to situations where an invention may have been first actually reduced to practice in outer space, and whether this can be used to establish a date of invention under United States patent law. The extent of territorial sovereignty in the airspace above a nation's boundaries is considered, along with the ramification of operation of the invention beyond this territorial sovereignty. It is concluded that reduction to practice in outer space is tantamount to reduction to practice in the United States, based on one of two theories: the operation of an integrated instrumentality, wherein the invention is not removed from the United States by reason of the spacecraft being necessarily distant; and a free space doctrine, wherein occurrences on board the space craft remain under the jurisdiction and control of the launching or registry nation."

Kestenbaum, Lionel, "Foreign Trademark Licensing and Antitrust Policy," *The Trademark Reporter,* Vol. 58, No. 5 (May 1968), p. 325.

"I would like to approach the subject assigned to me, Foreign Trademark Licensing, by a sort of round-about route and that is by talking, first, about trademarks and then into trademark licensing, and finally, into the peculiar problems, if any, presented by foreign licensing situations."

Kos, L. and Rabecwicz and Zubkowski, "Le Droit Commercial International Dans Les Rapports Est-Ouest," *Canadian Yearbook of International Law,* Vol. 5 (1967), p. 159.

"Legal Basis for Precluding a Patent Examiner from Testifying," *Journal of the Patent Office Society,* Vol. 49, No. 12 (December 1967), p. 841 at 845.

"This note will examine the legal bases upon which the Commissioner of Patents might rely in contesting the validity of the

effect of a subpoena issued to a patent examiner."

"Legal Perils of Parody and Burlesque," *Cleveland-Marshall Law Review,* Vol. 17 (May 1968), p. 242.

Lenzen, L. C., "Bacchus in the Hinterlands: A Study of Denominations of Origin in French and American Wine-Labeling Laws," *Trademark Reporter,* Vol. 58, No. 3 (March 1968), p. 145.

Lippert, L. E., Jr., "Patents: A Relatively Unrealized Asset," *Air Force JAG Law Review,* Vol. 10 (March-April 1968), p. 19.

Lipscomb, Ernest B., III, "Appeals From Patent Office Decisions," *Journal of the Patent Office Society,* Vol. 50, No. 3 (March 1968), p. 178 at 179-180.

". . . Although some attorneys feel the present remedy of appeal to the Supreme Court is sufficient to handle any glaring inequities in the appeal process, several interested parties have proposed various appellate remedies. However, the question of whether enough important conflicts are present to justify a serious change remains of foremost and prime importance. That question may best be answered by looking at some of the present conflicts between the respective courts."

Livermore, J. M., "On Uses of a Competitor's Trademark," *Stanford Law Review,* Vol. 20 (February 1968), p. 448.

Lunsford, J. R., Jr., "Trademarks and Unfair Competition: Need for Uniform State Laws," *Trademark Reporter,* Vol. 58, No. 2 (February 1968), p. 77.

Marke, J. J., "Copyright and Intellectual Property," *Albany Law Review,* Vol. 32 (Fall 1967), p. 1.

Marmorek, E. F., "Inventor's Common-Law Rights Today," *New York Law Forum,* Vol. 13 (Summer 1967), p. 274.

Mascarenas, C. E., "Los Delitos Contra la Marcas en al Proyecto del Nuevo Codigo Penal," *Revista de Derecho Puertorrigueno,* Vol. 6 (January-March 1967), p. 291.

"Mechanical Copying, Copyright Law, and the Teacher," *Cleveland-Marshall Law Review,* Vol. 17 (May 1968), p. 299.

Merna, James E., "U.S. Patent Office Finds a New Home—Crosses the Potomac to Crystal City, Virginia," *Journal of the Patent Office Society,* Vol. 50, No. 3 (March 1968), p. 191.

"This article is intended to provide a brief historical perspective of the problem confronting the United States Patent Office, the remedial action taken, and to describe the new surroundings and work environment of the U.S. Patent Office."

"Misappropriation Doctrine After Sears-Compco," *University of San Francisco Law Review,* Vol. 2 (April 1968), p. 292.

"Misuse Doctrine and Post Expiration—Discriminatory—and Exorbitant Patent Royalties," *Indiana Law Journal,* Vol. 43 (Fall 1967), p. 106.

Myers, Gary R., "Industrial Protection of Preproduction Disclosures," *Journal of the Patent Office Society,* Vol. 49, No. 11 (November 1967), p. 783 at 784.

"This Comment will analyze the various means a company may employ to protect preproduction disclosures which have been designed for a customer. More particularly, methods will be suggested to prevent the customer from reverse engineering the disclosures and producing the disclosed product, and to prevent the customer from distributing the disclosures to competitors of the disclosing company for competitive bids. Particular attention will be directed to patent, copyright, trade secret and contract protection."

North, P. M., "Further Disclosures of Confidential Information," *Journal of Business Law,* Vol. 1968 (January 1968), p. 32.

O'Brien, G. D., "Role of Patents and Trademarks in International Trade," *International Lawyer,* Vol. 2 (October 1967), p. 60.

"Patentibility of Chemical Intermediates," *California Law Review,* Vol. 56 (April 1968), p. 497.

"Patents and the Antitrust Laws," *Record of the Association of the Bar of the City of New York,* Vol. 23 (February 1968), p. 140.

"Patents—*Ex Parte* Procedure—*Res Judicata* Not a Proper Basis to Bar Patentable Claim," *Wayne Law Review,* Vol. 14 (Spring 1968), p. 686.

"Patents—The Assertion of a Fraud Upon the Patent Office as a Means of Defeating the Patent Monopoly," *New York Law Forum,* Vol. 13 (Summer 1967), p. 325.

"Patents – Utility Requirement – Comparison Between Chemical and Non-Chemical Inventions," *De Paul Law Review,* Vol. 17 (Winter 1968), p. 417.

Plasseraud, M. Hiance Y., "The New French Patent Law," *Journal of the Patent Office Society,* Vol. 50, No. 4 (April 1968), p. 209 at p. 213.

"The French law is actually the result of the fusion of a certain number of quite varied legal contributions. To the extent that it assimilates a few institutions borrowed from foreign legislations and that it tends towards a harmonization with the systems of the neighbouring countries, it of the neighboring countries, it

can be considered as a starting point for a future evolution, which could for instance appear as a contribution to the creation of a European patent.

"However, it is also the crystalization of a firmly rooted national tradition whose permanence guarantees, on the internal plane, the continuity of the jurisprudence."

Price, Joseph W., Jr., "Price Restrictive Patent Licenses," *Journal of the Patent Office Society,* Vol. 50, No. 2 (February 1968), pp. 127-28.

"This paper has been designed to trace the price restrictive doctrine from its judicial conception to its present-day position with attempts to analyze the arguments and forces which have produced the end result. In general, it may be said that when dealing with price restrictive licenses the Court has been less inclined toward errors of judgement than toward inadequate explanations for its decisions."

"Process Patents for Computer Programs," *California Law Review,* Vol. 56 (April 1968), p. 466.

"Protecting Architectural Plans and Structures with Design Patents and Copyrights," *Drake Law Review,* Vol. 17 (December 1967), p. 79.

"Public Use Bar to Patentability: Two New Approaches to the Experimental Use Exception," *Minnesota Law Review,* Vol. 52 (March 1968), p. 851.

Redmond, Joseph C., Jr., "Corporate Patent Attorneys—'Privilege' and 'Work Products,'" *Journal of the Patent Office Society,* Vol. 49, No. 11 (November 1967), p. 767.

"A brief review of the background of 'privilege' and 'work product,' a look at the cases originally denying or severely limiting patent attorneys with respect to these rights, an examination of the recent cases holding patent attorneys as 'acting as lawyers,' a review of the various aspects of patent work covered by 'privilege' and 'work product,' and the conditions under which these rights are preserved by patent attorneys will indicate the situation as it exists today."

Restrictions Ancillary to the Protection of Goodwill and Trademarks Symposium. — Introductory Remarks, W. B. Comegys, Jr.; Marketing Restrictions to Protect the Integrity of a Trademark and Preserve Goodwill, A. S. Ward; Marketing of Restrictions Imposed to Protect the Integrity of Franchise Distribution Systems, W. H. Orrick, Jr.; Enforcement Policy on Foreign Trademark Licensing, L. Kestenbaum; Panel Discussion (Comegys, Jr., Cohen, Keck, Kestenbaum, Orrick, Jr., and Ward), *American Bar Asso-*

ciation Antitrust Journal, Vol. 36 (1967), p. 49.

Richenberg, C. S., "International Cooperation in Patents—Past, Present and Future," *Journal of the Patent Office Society,* Vol. 49, No. 10 (October 1967), p. 734.

"At the very outset of this talk I must make a few remarks about the scope and nature of what I shall be saying. I have quite deliberately taken a very broad canvas indeed for my subject in an attempt to bring out the perspective of events as they seem to me to be likely to unfold, but this inevitably means that within the time allowed me I shall not be able to do much more than refer to some of the factors which are making international cooperation and eventual unification urgent and inevitable, to sketch very briefly some of the main historical landmarks, to outline what is going on at present (or rather what I personally know about), and to crystal-gaze a little into the future. What I shall have to say about the past and the present will, I hope, be a reasonably accurate record of facts as I know them, but what little I shall have to say about the future is of course a purely personal and very tentative view, and may well afford an instance of a fool rushing in where angels fear to tread!"

Samole, M., "Effects of Know-How Licensing in Foreign Trade," *Illinois Continuing Legal Education,* Vol. 6 (January 1968), p. 89.

Saragovitz, H. M. and J. A. Dobkin, "Patents, Technical Data and International Defense Agreements," *Villanova Law Review,* Vol. 13 (Spring 1968), p. 457.

Schwartz, S. D., *Res Judicata* as Applied in Patent Office Prosecution and Patent Enforcement Litigation," *Journal of the Patent Office Society,* Vol. 49, No. 9 (September 1967), p. 637.

Shanks, H., " *'Ex Parte'* Issue in Inter Partes Trademark Proceedings," *The Trademark Reporter,* Vol. 58, No. 1 (January 1968), p. 1.

"Stiffel Doctrine and the Law of Trade Secrets," *Northwestern University Law Review,* Vol. 62 (January-February 1968), p. 956.

Sutton, John P., "The California 'Model' Act: A Comparison with the Lanham Act," *The Trademark Reporter,* Vol. 58, No. 5 (May 1968), p. 305.

"Federal law has been expanding in the area of trademarks just as in many other areas. Since trademark law is an area left to the states under the Constitution, certain conflicts between state and federal trademark law have developed. This paper examines some of these conflicts from the vantage point of the new California trademark law enacted in 1967."

Sutton, J. P., "California 'Model' Trademark Act: A Comparison with Federal Law," *University of San Francisco Law Review,* Vol. 2 (April 1968), p. 198.

Symposia: Selected Papers from the 1967 Antitrust Symposium of the Federal Bar Association, Featuring The Growth and Importance of Franchising—At Home and Abroad: Introduction: The Significance of Franchising in 1967, F. M. Rowe; Exclusionary Restraints and Franchise Distribution, R. E. Wilson; Distribution Restrictions After *Sealy* (*U.S.* v. *Sealy Inc.* 87 Sup. Ct. 1847) and *Schwinn* (*U.S.* v. *Arnold Schwinn & Co.,* 87 Sup. Ct. 1856), E. M. Zimmerman; The Growth and Importance of Franchising — It's Impact on Small Business, P. F. Zeidman; Distribution Restrictions in Franchise Agreements—As Viewed By a Member of the Private Bar, E. W. Kintner, *Antitrust Bulletin,* Vol. 12 (Winter 1967), p. 1, 165.

Timberg, S., "Impact of Antitrust Laws on Multinational Licensing and Franchising Agreements," *Antitrust Bulletin,* Vol. 13 (Spring 1968), p. 39.

"Transparent-Wrap—The Continuing Case of Grant-Back Agreements," *Catholic University Law Review,* Vol. 17 (Winter 1967), p. 228.

"Treble Damages—Tax Treatment of Antitrust Policy," *Catholic University Law Review,* Vol. 17 (Fall 1967), p. 102.

Treece, J. M., "Trademark Licensing and Vertical Restraints in Franchising Arrangements," *University of Pennsylvania Law Review,* Vol. 116 (January 1968), p. 435.

"Utility Requirement in Chemical Process and Chemical Intermediate Patent Claims," *William and Mary Law Review,* Vol. 9 (Spring 1968), p. 826.

Watson, Robert C., "The Patent Office—Its Place in the Executive Branch," *Journal of the Patent Office Society,* Vol. 50, No. 3 (March 1968), p. 152-3.

". . . since 1812, a number of serious and knowledgeable supporters of our Patent System have advocated independence for the Patent Office. This is indeed an appropriate time to consider past recommendations that this action be taken and to determine whether or not the circumstances which presently exist are such as to warrant serious efforts to achieve what our predecessors recommended but did not succeed in obtaining. It appears to the writer that all of those concerned, inventors, industry, bar associations, and individuals interested in good Government, should now become active to this end.

"To make clear why it was that earlier supporters of independ-

ence for the Patent Office so recommended additional extracts from their writings will be presented."

Wayman, C. H., "Patent Protection in International Business Transactions," *Denver Law Journal,* Vol. 45 (Winter 1968), p. 69.

Wertheimer, H. W., "The Principle of Territoriality in the Trademark Law of the Common Market Countries," *The Trademark Reporter,* Vol. 58, No. 4 (April 1968), p. 230.

"Presumably on July 1, 1968, all customs duties and classical quantitative restrictions on the circulation of goods and services within the European Community will have been abolished. It would, however, be erroneous to assume that at the same time all barriers on the free flow of goods and services will have broken down.

"Many factual and legal obstacles still exist and will continue to exist for a long time to come. Among the legal obstacles those deriving from the existence of national legislation on industrial property rights play an important role. The object of this article is to examine the question of how far trademark law in the member States of the European Economic Community stands in the way of the free exchange of goods."

Wolk, Morris O., "Proximity Numbering of Dependent Claims," *Journal of the Patent Office Society,* Vol. 50, No. 1 (January 1968), p. 46.

"Upon preparing a patent application for issuance as a patent, the Examiner is required to renumber the claims, if necessary. Renumbering of dependent claims can be perplexing and wasteful of time, unless clear rules are provided therefor. The present article will attempt to supply rules and examples to assist in this."

Reports

University Studies on European Integration, No. 4, Vol. 2, "Research," (Brussels: European Community Institute for University Studies, 1967), 339 pp. at p. XV and XI.

"This is the second volume for 1967 of the annual bulletin published by the European Community Institute for University Studies. Under the title 'Research' we give information gathered from 287 institutes, centres and faculties in 23 different countries. Our publication comprises two sections, one listing and describing the various research centres and the second containing, as in the past, a record of all the research being carried out in the

universities on any aspect of European integration.

". . . The first publication contained 129 pages, the second 269, the third 402; the fourth publication had to be divided into one volume concerning tuition and this one concerning research centres and research projects, including studies and doctoral theses in preparation.

"The outward appearance of the handbook has changed, but not its objective: to facilitate the work of teachers and students of the problems of European integration and to help to establish contacts between them.

"To the European Community Institute for University Studies these contacts seem of the greatest importance. They strengthen the links between the universities of the countries belonging to the Community and those who are not members. They will help those outside the Community to understand it better, and will protect those inside the Community against too provincial an outlook on European integration. In our small world of today, even a European view on Europe's problems may be in danger of being a 'provincial' point of view, too limited to show the real proportions of the problems.

"For this reason we are glad to be able to give in this volume a better picture—although still far from complete—of study centres and research projects in the countries of Eastern Europe. We intend to obtain also a fuller picture of European studies undertaken in North America."

INSTITUTE'S STUDIES ON PRESIDENT'S COMMISSION RECOMMENDATIONS

Editor's Note: *These papers conclude the series emerging from the Institute's studies on "The Report of the President's Commission on the Patent System," and proposed legislation stemming from that Report. This is the sixth publication in* IDEA *of such papers. Previous Institute research papers appeared in Volume 11, No. 3 (Fall 1967); in Volume 11, No. 4 (Winter 1967-68); in Volume 12, No. 1 (Spring 1968); in Volume 12, Nos. 2-3 (Summer-Fall 1968); and in Volume 12, Conference Number 1968. In view of the urgency for factual information, it was decided to publish the papers as they were completed, rather than await their accumulation. All our research papers bearing on the President's Commission Report and proposed legislation are being compiled and will be published as a single monograph.*

Competent Inventors and the President's Commission

ROBERT B. BANGS*

INTRODUCTION

IN GENERAL, U.S. INVENTORS HAVE MIXED and not always favorable reactions to the major recommendations made in 1966 by the Presidential Commission to study the U.S. patent system and to make recommendations for its modernization and streamlining. However, these inventors could, in most cases, accomodate their operations without extreme difficulty to the proposed new procedures if they were to become law. This is a general finding, subject to numerous qualifications and exceptions, from a survey conducted by The PTC Research Institute in which groups of established U.S. inventors were questioned in depth.

* The author is a Principal Investigator, The PTC Research Institute and Economist with the U.S. Department of Commerce.

Responses came from both independent and employed inventors. In general, the employed inventors would be less directly affected by the recommendations and less prone to change their procedures than would the independents. This is largely because the employed inventors have most of their relations with the U.S. Patent Office handled for them by company patent counsel or by independent counsel retained by their employers for patent matters. Independent inventors are a bit closer to the difficulties of obtaining and policing their own patents. Nevertheless, both groups of inventors shared some common concerns about how particular recommendations would actually operate and voiced broadly similar reactions to the impact of certain recommendations upon their future activity as inventors.

This is a report on how certain recommendations made by the Commission on reform of the U.S. patent system would affect productive U.S. inventors. The material was collected primarily by a mail survey supplemented by limited personal interviewing in depth to test for consistency and completeness of the mail responses. The basic questionnaire was mailed in late 1967 and the responses were in hand by April 1968. A preliminary report of findings was made orally to The PTC Annual Public Conference in June 1968. This is an expanded and more detailed version of that preliminary report.

The inventors whose views were solicited for this report have each received a number of patents; hence they have all had repeated experience with the U.S. Patent Office and with other patent problems. The basic mailing list was compiled primarily by the Patent Office and consisted of American inventors who had each received six or more patents during a recent 10-year period. Foreign inventors, even though they had received a number of U.S. patents, were not included. Likewise, occasional inventors, who may have received only one or two patents, were not sampled.

Nature of the Survey

The information on which this report is based consists of nearly 200 completed and usable mail returns from competent U.S. inventors plus 10 personal interviews with respondents who had already filed a mail return which was particularly interesting or provocative. The mail questionnaire listed nine recommendations of the President's Commission and in each case asked the inventor to describe how and whether his operations, practices, and procedures would be affected or altered if the recommendation were to become law. In each case the actual

language used by the Commission to describe its recommendation was quoted to the inventor with a request for his comments. This was done to avoid possible bias from paraphrasing the recommendations. We did not ask how the inventor felt about the recommendation and whether or not he favored it; rather the focus was on what he would do to live with the recommended rule if he were compelled to.

The replies in most cases gave the inventor's opinion of the recommendation as well as the requested data on how his operations would be influenced. The replies indicated that in nearly all cases the inventor understood the nature of the recommendation clearly and had a reasonably firm idea about its potential impact on him and on other inventors in a like position.

Our intention was not to make an opinion survey but a survey of potential future practice. We thought that, in some respects at least, what inventors thought might be of less enduring significance than what they would probably do. The replies obtained nevertheless constitute both an opinion survey and a projection of operating principles.

General Nature of the Responses

The responses, as expected, revealed a wide diversity of opinion concerning the Commission recommendations, and a broad spectrum of techniques that inventors would use to adjust their operations to the proposed new rules if these became effective. The responses also showed a strong strain of conservatism about changing present procedures. By and large, most inventors would prefer to stick with existing processes unless the proposed rules could clearly demonstrate some marked advantages.

This was somewhat surprising in a group of respondents whose main stock in trade is novelty and innovation. In a nutshell, successful inventors may be advanced thinkers so far as technology is concerned, but they are as conservative as other groups where changes in law or in the institutional environment are concerned.

The sample of 200 returns on which the conclusions of this report are based is a small sample of the universe of American inventors. However, it was reasonably representative of the universe so far as the distribution between employed and independent inventors was concerned, and also with respect to the geographic distribution of returns. Chemical, electrical, and mechanical inventors were all represented in numbers that corresponded fairly well with the distribution of issued patents among these three broad fields. In other words, although the

sample was not scientifically designed, and no quotas were employed for different categories of respondents, rough tests show the sample to be reasonably representative of the larger population it covers.

Any sampling technique, of course, produces only estimates of the population parameters that are being measured. The present sample, based primarily on volunteer returns, probably overestimates the vigor of inventors' feelings about the Commission recommendations and perhaps overstates their plans to modify their practices. Inventors with definite views and with strong feelings were more apt to answer our questionnaire than those more indifferent to the Commission recommendations. Nevertheless, we have in the sample a number of returns that indicate the impact on inventors, of at least some Commission recommendations, would be minimal. By and large these latter returns come from employed inventors who regularly assign their patents to their employers. Independent inventors were generally more concerned about the proposed procedures, their cost, and whether their personal control over their inventions would be strengthened or weakened under the proposed new procedures.

Although the questions asked of inventors could be answered quite simply and briefly with a "yes" or "no," the respondents were invited to describe in detail exactly what they would do and to give reasons therefor. The majority of returns received contained written comment, in many cases extensive. This comment has proved rather difficult to summarize, although attempts have been made to do so.

What a report of this nature cannot properly convey is the flavor and texture of individual replies, each in some respects unique. In brief, a survey of this nature does not lend itself to purely statistical treatment; both the consensus of views and the diversity of them must somehow be indicated. The consensus in most cases is described by indicating what proportions or percentages of the respondents held what opinion. The diversity can only be suggested by occasionally quoting pungent or especially thoughtful observations made in individual replies.

The basic questionnaire mailed to the list of competent inventors is reproduced in the Appendix. From this some idea of the form of the responses can be obtained. Responses ran about 15 percent of the names initially circulated. This is typical for a mail survey of this degree of difficulty with no follow-up. The nature of the questionnaire was such that a thoughtful reply would require about an hour's time. In many cases the extended comment obtained indicated that more time than this was actually spent by the inventor who responded.

We are grateful to those inventors who gave so generously of their

time and experience in answering the searching questions put to them. Without this input, voluntarily given, no survey of this nature would have been possible.

Inventors clearly have a primary stake in the patent system. Without their efforts to improve products and processes, no patent system would be needed. This is not to say, however, that patent procedures should serve inventors exclusively or even predominately. The primary aim has always been public disclosure in exchange for a limited exclusive right to make, use, or sell the invention.

Inventors, like other groups, are motivated to some extent by self interest. Thus their views must be weighed against those of other interest groups in an effort to determine what proper public policy should be. In that sense this report is a one-sided one. It covers only what inventors think and would do. Other reports already made or to be made in this journal will portray the views of other groups such as corporate executives, managers of research and development programs, universities, and the Patent Bar. Only by reading all these reports can a rounded picture of reaction to the Commission recommendations be obtained.

First to File

The most controversial recommendation made by the Commission was for the introduction of a first-to-file system. At present under U.S. patent law the first to invent has a clear entitlement to the patent even though he is not the first to file. In making this recommendation the Commission clearly sought to speed up applications, to advance the time when inventions are publicly disclosed, and perhaps to expedite action within the Patent Office which now labors under a considerable backlog of unexamined applications. In the language of the Commission, it was thought that a first-to-file system would "encourage prompt disclosure of newly discovered technology; substitute for the delays and expense of interference proceedings a fair and inexpensive means by which an inventor can establish priority; and bring U.S. practice into harmony with that prevailing in almost all other industrial nations."

The inventors in our sample voiced considerable doubt that the proposed system would actually have these hoped for effects. Most inventors, especially the independents, thought a first-to-file system would increase the number of patent applications, cause many applications to be prematurely filed and later abandoned, and increase the

expense to inventors without the offset of solider or more readily defended issued patents.

Specifically, the first group of Commission recommendations, dealing with first to file, abolition of the one-year grace period, and redefinition of prior art to include worldwide information, was generally regarded by inventors as presaging important changes in their methods of operations. Of the more than 180 inventors responding to this question, 66 percent said they definitely would change their practice if these recommendations became law; 26 percent said they would not; and 8 percent were uncertain.

The great majority who would change their practice would do so by filing earlier than they now do and by filing more applications with broader claims than at present. The recurrent theme in these responses was that filing would be necessary on incomplete ideas, on inventions that were not commercially feasible, and on conceptions that for various other reasons were now abandoned before filing.

Independent inventors were more certain they would change their practices than were employed inventors. The latter group, however, often felt that their employers' patent departments or patent counsel would be required to file earlier and more frequently in a number of cases.

The theme of earlier or more frequent filing, or both, occurred in 68 percent of the cases where reasons for changing practice were given. Another 13 percent of the responses said that inventors would maintain greater secrecy under the proposed system than they now do; 14 percent said the proposed system would mean greater expense to them (for additional filings and more thorough searches of prior art); 5 percent gave no specifics as to how they would modify their practice, although they expected to do so.

It was apparent from the responses that the existing grace period is widely used to test both the technological soundness of inventions and their commercial potential. It was also evident that this testing results in a considerable attrition of apparently patentable ideas that do not mature into actual patent applications. The majority of articulate inventors consider this attrition a good thing since it results in solider applications for them and (they believe) less work for the Patent Office. They stressed repeatedly that they would feel obliged to file, under the proposed system, shortly after first conception and before their ideas were fully worked out, and that in numerous cases they would either abandon the application later or would be unable to find a commercial use for the patent if one issued.

Those inventors who would practice greater secrecy would do so

both in publication and in negotiation. Inventors who hoped to license their ideas for royalties felt they could no longer do so until they had filed, whereas now they often enter into these negotiations before filing. In several cases they felt this would actually delay the process by which an invention becomes translated into an actual production innovation.

The inventors who would not change their practices under the proposed system, 26 percent of those reporting, were generally either employed by very large corporations and hence were uncertain how or whether corporate practice would change or, if independent, were generally accustomed to filing very promptly and would continue to do so. This latter group, however, contributed heavily to the responses which mentioned that greater secrecy would be prudent under the proposed system.

Typical of the comments made by inventors in the sample about the first-to-file system were the following:

> —could lead to chaos in the Patent Office.
> —would require applying for a patent before proper testing of model.
> —greater emphasis on filing early, perhaps prematurely.
> —would result in the filing of many worthless patent applications.
> —we will become highly secretive.
> —unfair because it overlooks the need for a certain amount of experimentation involved in perfecting any invention.

On the other hand, the minority of inventors favoring the proposed system made such comments as:

> —basically good, especially if broad meaning is given to the preliminary application.
> —will help the independent inventor and will comply more closely with foreign patent laws.

These comments suggest both the variety of inventor opinion concerning these important and controversial recommendations and the vigor with which these opinions were sometimes expressed.

In summary, the majority of inventors do not see these recommendations as either helping to streamline Patent Office procedure or to strengthen the protection available to them for their inventions. Rather they see the recommendations as putting pressure on them to be hasty and less thorough, and as burdening them with a greater need for secrecy and greater expense.

It is possible that inventors do not fully appreciate the advantages that may reside in these recommendations or the benefits they might derive from them if they became effective. Be this as it may, the majority opinion among inventors would appear to be either openly

hostile to the proposals or at least unpersuaded that these changes would actually amount to a step forward. Naturally, as has so often been noted, inventors are apt to take a somewhat proprietary view of the patent system, and to feel that its contours should be shaped particularly for their benefit and convenience.

Although we did not obtain the reaction of inventors on this point, it would appear that the Administration's modification of the first-to-file and related recommendations, as outlined by Commissioner Brenner to a House Judiciary Subcommittee in February 1968, would go at least part way toward meeting the objections of inventors to a straightforward first-to-file system, and would be somewhat more acceptable to them.

According to the Commissioner's testimony, the current proposal is to limit interference proceedings and to retain the one-year grace period. This modified first-to-file system, it is thought, would largely eliminate the need for preliminary applications while still encouraging early filing. It would appear from our responses that inventors would be better satisfied with this modified system and that some of their concerns about secrecy and increased expense would be mollified if this system were to be enacted.

If a patent reform bill makes substantial progress during the next Congress, other modifications of Commission recommendations will undoubtedly appear. In its first-to-file recommendations the Commission appears to have gone beyond the point where contemporary opinion is prepared to follow.

Preliminary Applications

On the Commission recommendation to substitute a preliminary application for the present grace period, at least 80 percent of the inventors replying indicated they would use this procedure if it were available even though they did not favor it. Among the responding group 62 percent felt that if this procedure were in effect they would alter their customary practice significantly, generally to file more applications in this preliminary form than they now do when the applications must be more detailed and complete. Thirty-two percent of the respondents would not alter their practice appreciably although many of these inventors would use the preliminary application if available. Six percent had no firm view about this proposed change.

A significant group of inventors who did not favor the first-to-file system nevertheless felt this recommendation for preliminary applica-

tion partially met their objectives and that it would provide a framework they could live with, although they would rather see the grace period retained. A preponderant majority of this group commented about the large number of preliminary applications they and other inventors would file under this system, about the substantial fraction they would not follow up, and about the diversion of their time from perfecting an invention to filing preliminary applications. Numerous comments about increased secrecy and possible additional expense were also expressed.

Estimates of the volume of applications under this proposed system varied widely; but the modal conjecture was that this volume would about double. Generally, inventors found it difficult to see how doubling the volume of applications would expedite Patent Office procedure; doubtless many of them misunderstood and visualized novelty searches as making substantial progress while applications were still in preliminary form.

Considerable uncertainty was expressed over how informal preliminary applications might properly be and yet remain valid. Generally the less formal the acceptable preliminary application, the more inventors as a group were inclined to favor this alternative. In this connection their principal interest lay in how complete and accurate the description would have to be rather than in the absence of claims in the preliminary filing.

On balance, no great enthusiasm for the preliminary application was manifest among the responding inventors; but most thought they could use it if requirements as to form were truly minimal. Under this system they would also file more frequently, in some cases much more so, than at present. Many of these preliminary applications would be purely defensive and would not be consolidated into final applications. They saw little positive advantage to them in the preliminary application procedure.

Simplification of Who May File

On Commission Recommendation V, to simplify the formalities involved in who may file a patent application, the opinion of inventors was about equally divided as to whether this recommendation was desirable or not. Ordinarily a proposal for simplification could be expected to attract substantial support. The opposition expressed was largely directed to the point that the assignee might file without the inventor. Despite the fact that the signature on the application would

not affect the validity of the patent, there was a strong feeling that inventors might lose some status, or claim to special treatment, if this route were followed.

The opinion of inventors on this point was in fairly marked contrast to the manner in which their activities would be affected by the proposed rule. Nearly 80 percent of the inventors responding said this change would make little or no difference to the manner in which they conducted their operations; only slightly over 20 percent felt it would. The latter were largely independent inventors. Some of them thought the proposal would be helpful primarily to the Patent Bar rather than to them. Others thought it was primarily the large corporations rather than the inventors who would benefit.

Running through the responses was a feeling of uncertainty as to just how the simplification was to be achieved; also evident was a residual suspicion that any simplification might be, at least in part, at the inventor's expense.

On balance, this proposal, although apparently attractive and relatively noncontroversial, failed to arouse enthusiasm in the majority of inventors. This is another example of the strain of conservatism previously mentioned which was so apparent in many replies.

PUBLICATION

Recommendation VII of the Commission calls for publication of a pending patent application 18-24 months after its earliest effective filing date, or promptly after allowance or appeal, whichever occurs first. Under existing rules publication is made only on issuance of a patent; this may be several years (sometimes many years) after first application. The Commission thought this revised rule would prevent needless duplication of the disclosed work, would promote additional technological progress based on the work revealed, and would appraise entrepreneurs of their potential liability as possible future infringers.

Among the responding inventors 58 percent felt this rule, if followed, would not change their present practice significantly; 33 percent felt it would; the balance of 9 percent had no firm opinion. Views concerning the desirability of this rule were mixed, some inventors feeling that the sooner material was published the better, others feeling that early publication would preclude proper technical and market testing of new devices.

A few inventors saw the proposed rule as possibly constituting a barrier to complete development of their own ideas which are now not

disclosed to other inventors. A few more felt they would gain more from knowing what other inventors were doing than they might lose from disclosure of their own conceptions before they were complete.

In general, a substantial bloc of inventors had ambivalent feelings toward this recommendation, although they did not consider that it would influence their development work to any marked extent. As a rule, if a grace period were retained, inventors viewed this recommendation with much less alarm. They seem to want the timing of disclosure to be at least partly under their control and not to occur automatically when a prescribed time has run.

They were also torn between conflicting desires to keep their own work secret and to benefit from the disclosures of others. There is, of course, no solution to this kind of dilemma; a uniform rule must apply to all.

It would appear from this survey that inventors would probably not interpose serious objections to this proposed rule, even though they are far from unanimous in favoring it. Its operational significance for their work is less serious than a number of the other Commission recommendations.

Previously Allowed Claims

Commission Recommendation XI provided for Patent Office reconsideration of previously allowed claims until six months following publication. At present anyone who believes an application is pending in which claims are made that incorporate prior art may seek to bar issuance of a patent; but there is no regular way to come by the necessary information.

The recommendation would provide a six-months' period during which claims in applications would be public knowledge and proceedings for cancellation of such claims could be instituted. The Commission hoped that this recommendation would benefit both the applicant and the public, the former by having an opportunity to narrow his claims to avoid prior art, the latter by having an opportunity to cite prior art in an administrative proceeding rather than through costly litigation.

Among responding inventors in the present sample, 64 percent stated that this rule would not significantly alter their existing practice; 31 percent said it would; and 5 percent gave no opinion. Some independent inventors viewed this proposal with alarm, fearing that large corporations might use it aggressively. Confirmation of this came

from other respondents. One said, with some candor, that "we would actively engage in the practice of attempting to narrow the scope of our competitor's inventions." Obviously in most cases only a large corporation or a wealthy inventor could afford to spend time and money in such a pursuit.

Another objection to this recommendation that was mentioned went to the fact that a person citing prior art against a pending claim could remain anonymous whereas the claim itself and the name of the inventor making it had been published and was available to all. To some inventors this seemed unfair. Certainly it lends additional color to the fear that aggressive efforts to narrow claims could be undertaken under a cloak of anonymity by those with time and resources to engage in this kind of technological warfare.

Opposed to this, of course, is the well-known penchant of inventors and their attorneys for making claims as broad as possible in a patent application, in order to make the patent more valuable. There is surely some middle ground here which the public interest should seek to define.

Some inventors saw this recommendation as potentially holding back technological advance. One said, for example, that "testing programs would be held to a minimum until after this period." Another, noting that the recommendation provided for an opposition proceeding similar to that available in certain foreign countries, said that according to his experience in these foreign countries, the proposal would not produce a saving in time or money either from the standpoint of the opposer or the applicant but that it would delay patent issuance. Still other inventors noted that they would, under this system, broaden their claims beyond those they now make in order to provide for possible narrowing of their claims through these administrative proceedings instituted by their competitors.

On balance, it would appear that, while there is clearly some advantage in substituting an office procedure for a court procedure, this cuts both ways. More claims would undoubtedly be attacked than at present, if only because knowledge on which to base such attacks would be more readily available. On the other hand, the validity of issued patents should be improved somewhat if claims have survived attacks prior to the patent's issuance.

Inventors could either gain or lose under this recommendation. They might well do both in different cases. As a miminum, the proposal would probably intensify competition among inventors, which may or may not be regarded as a desirable result.

Amendment of Issued Patents

Closely related to the previous recommendation is Recommendation XV of the Commission which would allow the Patent Office to amend or cancel claims in already issued patents as a result of an administrative proceeding in which an adversary might attack claims as incorporating prior art and in which the patent owner could defend them. Such attacks would require payment of a relatively high fee to discourage indiscriminate attacks on issued patents.

At present there is no administrative procedure for cancelling issued patents. Only the courts can declare claims of such patents invalid; this invalidity often extends to the entire patent even though most of the claims in it are perfectly good.

The Commission reasoned that in some cases this recommendation would benefit the patent owner since he would be allowed to purge his patent of any unallowable claims without a court proceeding and without risking the entire set of claims in court. A three-year limit from date of issuance of the patent would be fixed for attacks of this nature; beyond that date no applications of this nature would be entertained.

In our sample, 65 percent of those inventors responding said this recommended procedure would make no significant difference to their customary patterns of operation; 27 percent said it would; 8 percent were uncertain. Those who would change procedure would generally do so by conducting more thorough searches of prior art in order to be in a stronger position to defend against attacks by their competitors. This they felt might well add to the cost of policing a patent.

Some inventors felt that the penalty for attacking a patent unsuccessfully through this administrative proceeding was too low and that the volume of such attacks would be unnecessarily encouraged by this recommendation. Several inventors said that the adversary would have too little to lose. Still others felt that a patent would be inherently weak for the three-year period provided by this recommendation and that it would be difficult to take action against infringers while some claims were subject to cancellation.

On balance it would appear that, although the majority of inventors are not strongly opposed to this recommendation and do not see it as of much operational significance in most cases, a vocal minority regard it as merely another technique by which large corporations can move against independent inventors to the possible disadvantage of the latter group. Even though the proposal would undoubtedly improve the

validity of issued patents that survived these office proceedings, this minority does not appear to want this protection.

This is another example of the refrain of conservatism already mentioned. Independent inventors especially seem to be wary of any change in existing procedure lest they lose something (often they are not sure what) in the process. However, the majority of inventors are not too greatly concerned about this recommendation, and in many cases are virtually indifferent to it.

Damages Prior to Issue

Recommendation XVII of the Commission would allow a patent applicant to proceed against an infringer prior to issuance of the patent; under present law there is no provision for this. Action against an alleged infringer could be taken only after publication of the application, plus a Patent Office holding that the claim in question is allowable, plus notice to the claimed infringer that he is presumed to be infringing.

An applicant's action, in claiming infringement of a process, would constitute a nonexclusive license to the infringer who would be liable for a reasonable royalty until the patent issued.

In view of earlier PTC Research Institute findings that many patents are commercially used considerably before issuance, this recommendation is of some economic as well as procedural significance. It is also necessary in view of other Commission recommendations. If an application is to be published before a patent issues, potential infringers would be free to copy the technology without cost until the patent issued. This would leave the inventor without any protection during the period when his invention was of greatest commercial value. Therefore this recommendation must be considered an integral part of the recommendation for early publication of an application at a fixed date following filing.

To use this procedure, an inventor would give up the right to an injunction as to things made prior to issuance. One practical question to which this recommendation gives rise is how and by whom is a reasonable royalty to be determined? If this is to be done within the Patent Office it will involve a wholly new procedure that could be fraught with much practical difficulty.

In the present sample of inventors, 65 percent felt this recommendation would mean no marked change in their activities; 25 percent felt it would; and 10 percent were uncertain or indifferent.

The inventors who opposed the recommendation did so because they felt it would encourage infringing and would deprive the inventor of potential profits since a "reasonable royalty" would not compensate him properly. As in other cases, opponents of the proposal were primarily independent inventors.

A few responses pointed out that, in reality, the inventor might have nothing to license, since completion of the examination of his application might show him not to be entitled to a patent. In these cases there could, of course, be no infringement. Still other responses noted that a nonexclusive license in existence prior to issuance might prejudice negotiations for most advantageous licensing subsequent to issuance. This would be the case, for example, when the inventor might find an exclusive license the best means of working his patent.

The majority of respondents did realize that some such recommendation as this was a necessary protection for themselves in a system compelling early publication of applications; hence they did not oppose it.

The responses in this case illustrate once more the conflicting considerations that are at issue in the Commission recommendations and the difficulty of reconciling these in the public interest. The broad aim of speeding up public access to new technology which runs through the Commission recommendation requires special provisions to safeguard the rights of inventors under our traditional system when these rights are essentially of a private, monopoly character. The more patent applications are to be made known to the public before patenting, the more the rights of inventors to compensation must depend on public acts or public determinations.

Bargaining between an independent inventor with a patent to license and a large corporation with the capability to use his invention may be a very unequal exercise in countervailing power; how much this bargaining should be modified by government intervention, ostensibly to protect the inventor, is a difficult philosophical question on which reasonable men may well divide. If inventors do not welcome such intervention, it is questionable whether the intervention is in the public interest. This kind of issue lies at the root of a number of the Commission recommendations and the responses to them.

It should be noted that inventors' opposition to early publication of applications was somewhat stronger than to this recommendation, which is clearly designed to fill a gap raised by early publication.

One should also note that, if examination of applications within the Patent Office could be made prompter, a number of the Commission

recommendations would lose much of their force. In effect, the Commission assumes that the time between application and issuance will continue to increase and that means must be devised of living with this longer interval without adversely affecting the interests of the different parties.

The earlier recommendations for speeding up Patent Office procedure, namely more Examiners, mechanical and other aids in searching, et cetera have come to be generally regarded as impractical or impossible of attainment in the very near future: Hence this new series of recommendations based on the assumption that this interval cannot be shortened. In this sense there is room to view the Commission recommendations as a second best or retrograde alternative. In politics, which is preeminently the art of the possible, second best solution frequently carry a degree of inexorability lacking in preferred or more logical solutions.

Life of a Patent

The Commission recommended that a patent should be valid for 20 years from the date of filing rather than for 17 years from the date of issue as at present. It was felt that this would encourage applications to be pressed vigorously, whereas now they often proceed slowly for want of promptness by the applicant in furnishing information, claims that are of potential future rather than actual present importance, of for other reasons. It was also felt by the Commission that this recommendation would be a move toward conforming the U.S. system with foreign patent systems.

The majority of inventors who responded to the questions about this recommendation felt that, in most cases, it would have little practical importance. Due to the rapid advance of technology, a good many patents become economically obsolete well before their legal life has expired; moreover, as the average time for examination is now about three years, the intent was clearly not to change the legal life of a patent significantly.

An overwhelming group of respondents, nearly 85 percent, said this change would have no effect on their practice or methods of operation; only 10 percent said it would; the remainder were indifferent. Those who would change their activities would do so generally by pressing their applications more vigorously; this is precisely the result for which the Commission hoped.

In the replies a number of inventors said that they or their companies frequently did delay pressing applications where a wholly new field of technology, which would take some time to develop economically, was involved. There thus does appear to be a basis for the Commission's feeling that inventors sometimes are in no hurry to see their applications through.

A few inventors objected to this recommendation on the ground that some of their best inventions had been held up in the Patent Office a long time, whether because of their own delay or delay in official procedure; hence they felt this recommendation would effectively shorten the life of some patents. Among those inventors who felt that 20 years was not the right period, about an equal number favored a shorter as against those who favored a longer period.

If some patent applications are unduly delayed, as seems clearly at present to be the case, then the life of a patent is not now uniform for different inventors. A move toward uniformity, such as the Commission here proposed, was generally applauded by most inventors.

Universal Patent System

Three Commission recommendations, two dealing with the Paris Convention, and one expressed in general language dealing with international harmonization of patent practice and a worldwide system of information storage and retrieval, were presented by the Commission as moves toward an eventual worldwide patent system. Inventors generally were favorable of these as ultimate objectives but skeptical of the likelihood of major moves being made toward this objective in the near-term future.

On the whole, responses to these questions were less than satisfactory, indicating that inventors who responded either had not thought sufficiently about them, or believed them too impractical to deserve extended analysis. A number of responses indicated little or no interest in a world patent system which they felt would serve primarily large corporations. Their own inventions, if patented abroad at all, are patented only in a few of the major industrial countries.

Although these recommendations were no doubt the most far-reaching in the group proposed by the Commission, they aroused far less interest among inventors than those dealing with U.S. patent procedure, and particularly those relating to the first-to-file system.

Conclusion

Our survey indicates that inventors view the Commission recommendations with mixed emotions and not always in a favorable light. There is definite hostility to the first-to-file system and a strong minority dissent to most of the procedural proposals. For a majority of inventors, close to two-thirds in most cases, the proposals would not cause important changes in inventive practice, but they would increase the number of applications, would promote secrecy in many instances, and perhaps would cause patents to be both more aggressively attacked and defended than they are at present.

Generally speaking, independent inventors are more vigorously opposed to the Commission recommendations, or more suspicious of them, than are the employed inventors; but the division does not run solely on these lines. Some independents favor nearly all the recommendations whereas some employees are vehement against them. As a group, inventors are rather well satisfied with the present system and in no hurry to change it, although critical of defects in the existing system

It is clear, from events since the Commission recommendations first appeared, that efforts to translate these proposals into law will mean the modification and even scrapping of some of the proposals. Already, in the several bills that have been prepared, some notable departures from the original recommendations have been made. An example is the proposal to abolish the grace period, which aroused a storm of protest and which the Administration has already abandoned. Other changes of this character will be evident if and when one of these bills is finally selected and moves toward enactment.

The Commission has performed a useful service in pointing up some of the defects in the American patent system and in making bold recommendations to overcome these defects. So far as inventors are concerned their success has been less than complete. No Commission could satisfy inventors completely and still show due regard for the public interest.

In presenting this survey of inventor reaction to the Commission recommendations, our aim has been, as always, not to take sides in an issue of public policy, but merely to illuminate the question by presenting facts bearing on its essentials. In this instance, the facts reflect how inventors feel about the Commission recommendations and how they would accomodate their operations in advancing technology to these recommendations if they were required to.

APPENDIX

1. (Recommendation I)

REDEFINITION OF PRIOR ART TO INCLUDE PUBLIC INFORMATION AVAILABLE ANYWHERE IN THE WORLD; AWARD OF PATENT TO FIRST TO FILE[1]

"Prior art shall comprise any information, known to the public, or made available to the public by means of disclosure in tangible form or by use or placing on sale, anywhere in the world, prior to the effective filing date of the application.

"A disclosure in a U.S. patent or published complete application shall constitute prior art as of its effective (United States or foreign) filing date."

This recommendation has three significant components which are listed below. Will you respond to each.

1. Patent is granted to first to file[1]
2. Present grace period would no longer exist
3. Worldwide public information becomes a reference—this includes "on sale" or "use".

If any of the three components is enacted, will you change your method of operation in your fields of technology? Yes.....No..... Please explain.

2. (Recommendation II)

SUBSTITUTION OF PRELIMINARY APPLICATIONS FOR THE PRESENT GRACE PERIOD

"A preliminary application may be used to secure a filing date for all features of an invention disclosed therein, if the disclosure subsequently appears in a complete application. Requirements as to form shall be minimal and claims need not be included.

"One or more preliminary applications may be consolidated into one complete application filed within twelve months of the earliest preliminary or foreign application relied on."

If the above recommendation is enacted, will you change your method of operation in your fields of technology? Yes.....No..... Please explain.

3. (Recommendation V)

SIMPLIFICATION IN FORMALITIES FOR FILING AN APPLICATION

"Either the inventor or assignee may file and sign both the preliminary and complete applications.

"Any application filed by the assignee shall include a declaration of ownership at the time of filing and, prior to publication of the application, shall include a declaration of originality by the inventor and evidence of a recorded specific assignment.

---

[1] Abolition of Interference Proceedings. See paragraph (a), bottom of page five of The Report of the President's Commission on the Patent System. Also note references to "prior art" in Recommendations XI, and XV.

"Every application shall include, at the time of filing, the name of each person believed to have made an inventive contribution.

"Omission of an inventor's name or inclusion of the name of a person not an inventor, without deceptive intent, shall not affect validity, and can be corrected at any time."

If any of the sections quoted above is enacted, will you change your method of operation in your fields of technology? Yes..... No..... Please explain.

4. (Recommendation VII)

PUBLICATION OF PENDING PATENT APPLICATIONS[1]

"Publication of a pending application shall occur eighteen to twenty-four months after its earliest effective filing date, or promptly after allowance or appeal, whichever comes first."

If the above recommendation is enacted, will you change your method of operation in your fields of technology? Yes..... No..... Please explain.

5. (Recommendation XI)

PATENT OFFICE CONSIDERATION OF PREVIOUSLY ALLOWED CLAIMS UPON INFORMATION SUBMITTED AFTER PUBLICATION[2]

"The Patent Office shall consider all patents or publications, the pertinency of which is explained in writing, cited against an application anytime until six months after the publication which gives notice that the application has been allowed or appealed to the Board of Appeals. If the Patent Office, after the citation period, determines that a claim should not be, or have been, allowed, the applicant shall be notified and given an opportunity *ex parte* both to rebut the determination and to narrow the scope of the claim. The identity of the party citing references shall be maintained in confidence.

"Public use proceedings, as at present, may be instituted during the citation period."

If the above recommendation is enacted, will you change your method of operation in your fields of technology? Yes..... No..... Please explain.

6. (Recommendation XV)

PATENT OFFICE RIGHT TO AMEND OR CANCEL CLAIMS IN ISSUED PATENTS

"The Patent Office, upon receipt of a relatively high fee, shall consider prior art of which it is apprised by a third party, when such prior art is cited and its pertinency explained in writing within a three-year period after issuance of the patent. If the Patent Office then determines that a claim should not have been allowed, the patent owner shall be notified and given an opportunity *ex parte* both to rebut the determination and to narrow the scope of the claim. Failure to seek review, or the affirmance of the Patent Office holding, shall result in cancellation of the claim.

---

[1] See also Recommendation XI.

[2] This recommendation describes a technique which would be employed if Recommendation I were enacted into law.

"When the validity of a claim is in issue before both the Patent Office and a court, the tribunal where the issue was first presented shall proceed while the other shall suspend consideration, unless the court decides otherwise for good cause.

"Anyone unsuccessfully seeking Patent Office cancellation of claims shall be required to pay the patent owner's reasonable cost of defending such claims, including attorney's fees. The Commissioner shall require an appropriate deposit or bond for this purpose at the start of the action."

If the recommendation is enacted, will you change your method of operation with respect to patents *you may obtain* in the future? Yes.....No.....
Please explain.

If the recommendation is enacted, will you change your method of operation to take advantage of the opportunity to present prior art applicable to *someone else's* issued patent? Yes.....No..... Please explain.

7. (Recommendation XVII)

DAMAGES FOR INFRINGEMENT PRIOR TO PATENT ISSUANCE

"For infringement of a claim which appears in both an application as initially published and in the issued patent, damages may be obtained for an interim period prior to issuance. Such period shall be measured from after the occurrence of all of the following events: (1) the initial publication, (2) a Patent Office holding that the claim is allowable, and (3) a transmittal to the alleged infringer of actual notice reasonably indicating how his particular acts are considered to infringe the claim.

"The applicant's election to create such interim liability, by his transmittal of notice, shall constitute the granting of a reasonable royalty, nonexclusive license, (1) extending only until the issuance of the patent for any infringement involving a process, and (2) extending to and beyond issuance for any infringement involving a machine, manufacture or composition of matter, which is made prior to the issuance of the patent.

"In exceptional cases, damages for interim infringement up to treble reasonable royalties may be assessed."

If the above recommendation is enacted, will you change your method of operation in your fields of technology? Yes ..... No ..... Please explain.

8. (Recommendation XVIII)

EXTENSION OF THE TERM OF A PATENT

"The term of a patent shall expire twenty years after its earliest effective U.S. filing date."

If the above recommendation is enacted will you change your method of operation in your fields of technology? Yes ..... No ..... Please explain.

9. (Recommendations XXXIII, XXXIV, and XXXV) [1]

TO TAKE STEPS TOWARD A UNIVERSAL PATENT SYSTEM

XXXIII

"The United States should take a position in favor of the proposed revision of the Paris Convention whereby a right of priority may be based on an application for an inventor's certificate."

XXXIV

"Efforts should be made to have the Paris Convention modified to remove any obstacle to measuring the term of a patent from an effective foreign filing date."

XXXV

"The Commission believes that the ultimate goal in the protection of inventions should be the establishment of a universal patent, respected throughout the world, issued in the light of, and inventive over, all of the prior art of the world, and obtained quickly and inexpensively on a single application, but only in return for a genuine contribution to the progress of the useful arts.

"To this end the Commission specifically recommends the pursuit of: (1) International harmonization of patent practice, (2) the formation of regional patent system groups, and (3) a universal network of mechanized information storage and retrieval systems."

If you are concerned with filing abroad

A. What are your major problems today?

B. Will the recommended steps directed to the goal of a universal patent system reduce, increase, or not affect them? Please explain.

The recommendations you have considered represent the major changes proposed by the President's Commission. You may have comments on the remaining proposals or separate issues which deserve study. Accordingly, we will welcome any additional views you may wish to offer.

---

[1] These three recommendations have been grouped since their joint purpose is to move toward the ultimate goal of a universal patent system.

Informed Foreign Experience and Opinion on Provisions Similar to Commission Recommendations

L. JAMES HARRIS* AND GERARD J. WEISER**

THIS IS THE SECOND PAPER emerging from material collected on the experience of European and other foreign experts under provisions of their laws that are similar to the recommendations of the Report of the President's Commission on the U.S. patent system.[1] This article presents the views of 40 foreign experts on those Commission recommendations that appear to have potential, if adopted, for significant change in the U.S. patent system. On a number of occasions, the experts queried—most of them were interviewed in depth[2]—suggested that we question other experts, representing different disciplines. These suggestions were followed up by means of interview or mail questionnaire.[3] Respondents include government officials, private

* Director, The PTC Research Institute; Professor of Law, The National Law Center, The George Washington University.

** Research Associate, The PTC Research Institute; partner in the firm of McClure, Weiser and Millman, Philadelphia.

[1] See Harris, "Notes on Informed European Opinion Regarding Industrial Property—Summer 1967," Vol. 11, No. 3 (Fall 1967), pp. 289-305.

[2] Professor Harris conducted these interviews during the summer of 1967.

[3] See Appendix for basic interview guide which was also used as the mail questionnaire.

practitioners, and business executives in Switzerland, Germany, Denmark, France, The Netherlands, Japan, and India.

We want to express our deep appreciation to the following participants, who comprised the universe of our study, for their generous cooperation: France—Roger Gajac, Paul Mathely, Jean Monnet, Casimir Massalski, Zinovi Weinstein; Germany—F. K. Beier, Gerhard Schricker, Ludwig Baeumer, Ulrich C. Hallmann, Otto J. Nathansohn, Otto Bossung, Kurt Haertel, Erich Reichelt, Georg Stargard, Rudolf Seibert, Goetz M. Pollzien, Messrs. Harder and Cramer, Gerhard Irmisch, Erich Knopf; Denmark—Andreas Morsing, J. Pedersen, F. Hjorth Hansen, P. O. Langballe; India—L. S. Davar; The Netherlands—Leon Feyereisen, M. van Waasbergen, H. W. Wertheimer, G. T. Hamelink, J. C. S. Warendorf, D. A. Was, C. J. de Haan, C. M. R. Davidson; Japan—Kotaro Otani, Hiroshi Nakamota, Sekizo Hayashi, Akira Hirano, H. Ono, Makoto Isogai, Y. Hirowatari; Switzerland—CIBA, Ltd.[4] This report is concerned mainly with factual information and expert opinion derived from these persons who are known to have had extensive experience with the patent systems of their own countries.

First-to-File v. First-to-Invent Systems

Advantages and Disadvantages

Encounter with foreign experts suggests much agreement in their attitudes toward and experience with first-to-file systems. A key question asked was, "What are the advantages and the disadvantages of your first-to-file system?" The majority of the experts showed a definite preference: they were of the opinion that a first-to-file system was certain, practical (easy to administer), and simple. They stressed the practical aspect—that inventorship was readily proven. It was generally assumed that the first to invent was the first to file because the first inventor risked anticipation if he did not file quickly. Most respondents thought that the elimination of the complex interference procedure and reliance on documentary proof made for less uncertainty in evaluating the prevailing patent situation. A German industry expert succinctly expressed the foreign attitude: "In the U.S. a patent may be invalidated many years after the grant, in interference proceedings."

[4] A questionnaire was sent to Dr. Jurg G. Engi at CIBA, Ltd. in Switzerland. Since he was no longer employed by CIBA, the company had the questionnaire completed and returned to the Institute. The response is not attributed by the company to any particular CIBA employee.

A number of respondents favor a first-to-file system because they consider it offers an incentive (by means of a reward) for promptly disclosing the invention to the public. For example, a German university professor reasoned that, ". . . a first-to-file system is in greater harmony with the basic aim of a patent system which, rather than merely reward an invention's first conception as such, should provide an incentive for an inventor to disclose his invention to the public."

Generally, the respondents saw no disadvantages in a first-to-file system. As the discussion extended to other questions, however, it became clear that certain disadvantages were either unacknowledged, unrecognized, or considered worth the cost, in view of reciprocal advantages. Some, of course, saw no drawbacks at all, but others felt that such a system neglected the indigent or uninformed inventor, and may even defraud the creative person (e.g. when the first to file was not the inventor). There was also concern that the first-to-file procedure resulted in a rush to the patent office with incomplete or immature inventions.

Rights of the Inventor and the First to File Under a First-to-File System

Another question asked was this: "Under your first-to-file system, what rights does the inventor have? The patent holder have? As between themselves, and as to the general public?" The answers to this question were intended to elicit information on the actual treatment of a prior inventor under a first-to-file system, and to supplement the responses to another question regarding this element of patent practice. The other question was: "What rights does a party have who has made the invention, but has never filed a patent application?" The replies to both of these questions gave the impression that foreign systems were primarily concerned with the rights of the prior user and the actual inventor, whether or not he was the first inventor. Although respondents pointed out that a valid patent could not be obtained where the first use was public, foreign laws generally made concessions in favor of a secret prior user, or a prior personal knowledge.

Curiously, in response to the first question, most of the experts were of the opinion that there was no public interest involved. Some respondents, however, did recognize that a public interest should be considered where, for example, a member of the public might be discriminated against. Another factor involving public interest was expressed in the words of a German expert from industry: "The

general public is interested that applications are filed and published as early as possible."

If the patentee acquires the invention from the actual inventor through a breach of trust, the experts hold that the victim of the abuse can obtain the patent in a proceeding provided therefor. To support this position, a well-known Danish patent agent cited the proposed new Danish patent law: "Articles 17 and 18 of the New Law (effective from January 1, 1968) provide for transfer of an application to the true and first inventor (or his assignees) if it can be proved that the first applicant was not entitled to the invention."[5] The respondents concede, however, that it is most difficult to prove that the invention has been stolen by the patentee.

Despite an absolute patent title to the first to file, some kind of personal right of the first user is generally recognized. The responses uniformly indicated that the patentee took subject to the right of the person who used the invention in good faith prior to the filing date, or who made substantial preparation therefor.[6] The viewpoints expressed by the French experts revealed that they were more keenly aware of possible inequities in the first-to-file system; therefore, it was not surprising to find that, in France, the right of personal knowledge is a somewhat more liberal privilege than the right of prior use available in other European countries. Foreign respondents acknowledged that the first-to-file system might be prejudicial to indigent, independent inventors and businesses of limited means, but accepted the potential inequity on the ground that such a system was in the best

---

[5] The Danish Patent Act—Law No. 479 of December 20, 1967.

Section 17. If any person other than the applicant claims before the Patent Office to have a title to the invention, and if the case is deemed uncertain, the Patent Office may direct him to bring an action before a court of law within a fixed period at the risk of the claim's being disregarded in the further processing of the patent application.

If a suit regarding a title to an invention in respect of which a patent is applied for is pending before the courts, the patent application may be declared in abeyance until the suit is finally decided by the courts.

Section 18. If any person proves to the Patent Office that he and not the applicant has a title to the invention, the Patent Office shall, if he so requests, transfer the application to him. The transferee shall pay a renewed application fee.

If a request is made for transfer of a patent application, the application shall not be dismissed, rejected, or granted, until a final decision has been made on the request.

Industrial Property published by BIRPI (Geneva: June 1968).

[6] See Section 4, Chapter 1, Nordic Patent Legislation. *Industrial Property* (BIRPI), June 1968.

interests of the majority of the citizenry. A very revealing opinion was expressed by two experts from Germany that "treatment of the so-called 'minority' is analogous to the unfavorable procedures with which foreigners must contend under U.S. interference practice."

It appears that controversies relating both to rights of prior user and to abuse of patent rights are generally brought in the courts; a prior user often prefers to allege his first use as a defense in an infringement proceeding. Such cases are determined on the basis of written documents, rather than on oral testimony. Instances of prior use or abuse of patents, however, were considered quite rare: None of the Danish or German experts questioned had personal experience or knew of any court cases involving such controversies; and the Dutch also reported infrequent questioning of patentees' rights by a prior personal user. Nevertheless, prior user rights against patentees were reported—from the responses received from French experts, it appears that there were some 45 cases in 100 years in France, including four or five in the last ten.

Rights Between Consecutive Filing Parties

An effort was made to obtain information on the manner in which the scope of claims affect the rights between consecutive filing parties. This question was intended to ascertain whether there was anything unique in the actual area of monopoly that the first to file was accorded under these foreign systems. The question asked was: "What are the rights of the second party to file? Suppose he claims a broader concept of invention than the first to file?" The general response to the first part of the question was that a second party, who claims the same invention as a first to file, had no rights to a patent; in almost every case, however, the second part of the inquiry was treated differently. There was much support for the position that a second party, claiming a broader invention than the first, took subject only to the narrower first-to-file invention, and that the second was entitled to both the inventive portion of his embodiment and to equivalents thereof. The replies by the French experts appeared to be somewhat contradictory: Some replied that the claims of the second party were anticipated completely; others, that the second party was entitled to broad claims subject, however, to the narrower invention of the first to file. Respondents in the latter category appeared to agree, however, that the first inventor, who was second to file, would not be able to interfere with the rights to the invention by the first to file, except

with respect to aspects essential to its operation, but not disclosed by the first to file.

Grace Period

Respondents reported that "there was no grace period" in their countries similar to "the grace period in the United States." Nevertheless, the Japanese and Germans noted a six-month personal grace period, and the French, the Dutch, and the Danes expected such a period to be introduced in their respective laws in the near future. In response to the question, "Do you have many problems in the evaluation of the invention prior to filing?" most experts answered "no." In many cases, further elaboration indicated that the negative answer was prompted by the relatively small application fee required. Replies such as, "evaluation is made after filing," "the problems are the same in all countries," and "evaluation is secret before filing" were also encountered. They were usually accompanied by expressions of concern with foreign anticipation, if secrecy before filing were not maintained.

Two additional questions provided further interpretation of these replies. The first of the questions asked was: "Do courts distinguish between experimental and public use?" If public experimental testing were permitted, we thought it might shed light on the foreign attitude toward secrecy prior to filing. Surprisingly, none of the respondents, except the Swiss (and an Indian expert), indicated that their courts distinguished experimental use. The Japanese referred to Article 30 of their patent law, which provides an exception to loss of invention disclosed by experimentation, if "such person files a patent application within six months." Article 69, however, states that, "The effect of a patent right shall not extend to the working of the patented invention for experiment or study."

The second question asked how they tested the commercial value of the invention if "they had not yet filed the patent application." The replies checked with the responses to our question on problems in evaluation of the invention, referred to in the first paragraph of this section: Most of the respondents tested their creative endeavors after filing; somewhat fewer experimented secretly before filing; and several tried out their ideas after they had secured protection under the Paris Convention (i.e., provision for the protection of inventions displayed at exhibitions).

It appears that the independent French inventors encounter consid-

erable difficulty in persuading companies to test their inventions. The French courts, however, are rather liberal and do not consider some forms of testing or public disclosure a bar. For example, if use is made under circumstances in which the parties are bound to secrecy, the use is not deemed "public."

"What is the prevalence (how many) of patents challenged on the ground of a public disclosure prior to filing? Have these challenges generally been settled by the license route?" were asked the experts. Except for the Japanese, most of the respondents (Danish, French, German, Dutch, Indian and Swiss) appeared to interpret "public disclosure" as meaning "public use," and responded negatively to both parts of this question. On the other hand, specialists did report that many patents were challenged on the basis of prior publication. One Japanese expert replied that, "Almost all opposition procedures are initiated on the ground of a public disclosure such as printed publications prior to filing." An executive from the French chemical industry expressed another view: "Not many chemical patents are being challenged on the grounds of public disclosure . . . since the chemical art literature is a good one."

A few examples of the type of response received to the second part of the question should be cited. If there is strong evidence to indicate that the patent is invalid, "industry generally will not pay anything for the patent," cautioned a leading French patent agent. In those cases, however, where opposition or invalidation procedures have not yet been brought, or where they could be discontinued by the parties, and there is some doubt as to the effectiveness of the prior publication, the settlement of alleged disclosure cases by the license route is not uncommon.

Some of the replies from France, Holland, Switzerland, India and Japan suggest that "a period allowing for evaluation of the invention or for testing the market" prior to filing would be desirable. Most of the experts, however, were opposed because it "would introduce legal insecurity" or because it would endanger foreign rights. A grace period seemed least attractive to industry experts. Respondents from countries, such as Germany, that offer only a limited personal type of grace period, favored the adoption of such a period internationally, to protect against the possible loss of foreign rights.

Where experts did favor a grace period, it generally was limited to six months, regardless of technical field. Although it was suggested by some that differences in technical field might have some bearing on the kind of grace period needed, the practical difficulties of legislating

a variety of periods was recognized. Curiously, while experts from other countries who favored a period appeared to prefer the German type, the Germans planned to "review" their period—and one German expert even favored its abolition.

In view of the commonality in the reasons given by the foreign experts against allowing a period for testing the market prior to filing, the opposition cannot be dismissed lightly. Some of the observations on which there was strong agreement were: The difficulty an inventor would encounter in proving that the disclosure stemmed from his own work; the application could be withdrawn if the original evaluation was too optimistic; and a period of evaluation would delay filing and prolong "legal insecurity."

Preliminary Applications

Preliminary applications were suggested in Recommendation II of the Report of the President's Commission to obtain "many of the advantages of a grace period . . . without the associated problems." The responses confirmed our understanding that no continental European country incorporated preliminary applications in their laws; and governmental representatives, particularly, informed us, in no uncertain terms, that they did not fancy this type of provision. A Dutch quasi-government official summed it up: "We would like to have one clear-cut document to examine. The preliminary application is generally not very clear. There is also the problem of its relationship to the complete application. The preliminary application may have advantages for an applicant, but it is a distinct disadvantage for novelty examination."

A different point of view was expressed by a German company executive: "We do not have in Germany provisional applications as in England, and the introduction is not contemplated. But I feel that the English system offers remarkable advantages." A French company executive agreed with his German colleague—without, of course, being aware of the latter's reply. The Frenchman thought preliminary applications very useful. He had actually "utilized a similar application in Great Britain," and added that he "would like them to be introduced in France."

It appears, from some of the replies, that regulations which allow for the filing of additional examples and improvements to the description, in effect, eased the pressure—even the need—for preliminary applications.

NOVELTY AND THE EFFECTIVENESS OF EXAMINATION PROCEDURE

The first recommendation of the Commission would make prior art "any information, known to the public, or made available to the public . . . anywhere in the world, prior to the effective filing date of an application"; thus, foreign public knowledge, use, or sale would be included as prior art. This change would eliminate, for the purposes of determining prior art, the present distinctions between domestic and foreign disclosures. According to the Report of the President's Commission, it "would be another step toward conformity with European patent laws and would promote acceptance of a common definition of universal prior art."

The foreign experts were canvassed on this absolute novelty provision by means of seven questions. The first four questions, as a group, were directed specifically to their experience with worldwide public information as a reference. The second group of three questions concerned their interpretation of, and attitude toward, the subject of novelty per se.

Only the French and Dutch experts indicated that foreign public knowledge, use, and sale is considered prior art in their countries. Even in these countries such information is rarely used because oral testimony is not acceptable; proof must be documentary and clearly anticipatory. To demonstrate that, despite the strict proof demanded, absolute novelty was a feasible requirement, examples were brought to our attention of American-owned European patents declared invalid as a result of public use in the U.S. during the grace period allowed for the U.S. patent.

Replies to the first group of questions also disclosed how the foreign experts interpreted "public knowledge"; and informed us of their experience with the acquisition, the cost, and the possible bias of information on that knowledge. The responses to the question on "public knowledge" augured well for a meaningful comparison of this term in the various countries. An eminent French advocate expressed the common view that, "the sole criterion of the absence of novelty is the availability to the public." In his opinion it was not necessary to prove the actual knowledge by the public: "It is enough to prove that the public *could* have access to the invention, even though the invention remained in fact unknown."

In countries embracing the concept of absolute novelty, the experts were not sure that obtaining information from abroad placed an undue burden on small companies. The following response by a highly

regarded Dutch patent agent placed the situation in perspective: "Such testimony is very rarely sought since prior use is generally obtained from a later publication."

This agent also explained why he had not found "such testimony prejudicial" to domestic applicants: "A rogatory Commission designates someone in the country, generally a judge, to take the testimony. Testimony of foreign nationals with respect to foreign use is not sought too often."

A few comments on the responses to the second group of questions. There appears to be general agreement that "judicial certainty is promoted" by the examination procedure—the experts in non-examination countries tend to regard the examined patents of the U.S., Germany and Holland as quality standards. Companies are more likely to invest in foreign patents if the same invention has been awarded patent coverage in one of these countries. The experts were also asked whether "judicial certainty was promoted by absolute novelty." Even those who favored the concept of absolute novelty recognized that, in the words of a Dutch industry representative, "judicial certainty taken in the sense that the holder of a patent is completely sure of his rightful claim to his exclusive right, can be impaired by absolute novelty." An appreciation of the risks involved, as compared with those under more liberal systems, prompted another Dutch expert to amplify: "In Holland only a 'reasonable' absolute novelty is required. Search is made to get as much judicial certainty as possible; allowance is made for the unrestricted search material, the imperfection of classification and human shortcomings."

In general, respondents were of the opinion that novelty was determined by a comparison of the invention with a single disclosure; and that inventive step was based on a comparison of the invention with a combination of prior art disclosures.

Respondents appeared to be in accord on the purpose and meaning of claims and could even be characterized as enthusiastic about the possibility of claim harmonization—with the German type of claim heavily favored. A number predicted international cooperation on such harmonization.

There were several other matters associated with examination systems on which the experts seemed to agree. They believed their countries had adopted examination systems generally to improve the quality of patents. For the most part their experience with examination of patents had been good; and they were convinced that patents issued by their respective countries had been effective.

Despite the movement of the French toward some kind of examination system, all the replies from that country rated their patents, issued under their registration system, as effective. The reasons given for this optimistic appraisal included: relatively high litigation costs, deterrent civil and criminal penalties, rapidity of issue, enjoinment possibilities, specialized judges, courts' favorable attitude toward patent owners, and lack of claim limitations. Only a French expert from government modified his enthusiastic endorsement somewhat by adding: "Their [French patents] legal effectiveness seems to be excessive, in consideration of their dubious legal validity. But for this last reason, they are not very effective from an economic point of view."

Early Publication

Desirable, but. . .

We were surprised with the number of foreign experts who agreed on 18 to 24 months as "a desirable period for pendency of an application in the Patent Office before publication"—and the relatively few examination countries in which pendency limited to this period had been achieved. In most cases, however, these responses were hedged. For example, a representative from Danish industry, focusing on the applicant's point of view, thought that, "The applicant often needs a couple of years, or more, to realize the possibilities of use of the invention and to improve it and the patenting thereof"; he amplified that he would be unwilling to risk use by another, or preparation for such use, by premature publication. An eminent Dutch patent agent iterated this position: "From the applicant's point of view, it would be desirable to continue the pendency in the Patent Office of the application before publication as long as possible." And a German company executive stated his attitude in almost the same language: "In some cases the inventor could be interested to delay publication of his invention as long as possible." Usually, the respondents went on to explain that they considered early publication in the interests of the third party or the public.

A well-known French patent agent expressed the reasons for restraint in more detail. He stated, "[The applicant] usually desires the patent to remain secret as long as possible, to enable him to introduce therein some improvements, and then to avoid disclosing his invention to third parties before licensing someone, or working the invention himself."

Will Relevant Public Benefit?

The propensity of the scientific community to "study patents and patent applications as a type of disclosure of scientific information" is clearly evident in the replies we obtained to Questions 4 and 5.[7] Approximately 20 of 23 respondents indicated that the scientific community[8] made use of such disclosure. Even more meaningful, with respect to the possible benefits of early publication, are the replies to Question 5, on the likelihood of study of earlier published applications by the scientific community. The responses to Question 5 reinforce the impression that much store is placed by this community on patent disclosures, and that earlier availability of this information would be deemed in its interest.

With the exception of The Netherlands, where deferred examination had already been introduced, publication was apparently not made "before examination or allowance of a claim." Since deferred examination has now been embraced by Germany[9] and France,[10] the applications in those countries will probably be published earlier. Also, the recently issued Danish, Finnish, Norwegian, and Swedish patent laws include a provision for publication of the application 18 to 24 months after filing.[11].

Damages Before Issue

Recommendation XVII was made by the President's Commission to provide protection to the patent owner for the period from publication to patenting. It was believed that publication of an application, without protection for the patent owner for the period before issue, might permit extensive use by a copier prior to issue, even to the extent of "exhausting the invention's commercial value." In response to

---

[7] *Question 4:* Does the scientific community study patents or patent applications as a type of disclosure of scientific information?

Question 5: If patents or applications were published earlier would they be more likely to be studied by the scientific community?

[8] Interviewees were asked, for the purposes of Questions 4 and 5 (Area J), not to consider the term "scientific community" as including industry R&D personnel.

[9] See Articles 28, 28a, 28b and 28c, German Patent Legislation (Text of January 2, 1968), *Industrial Property* (BIRPI), May 1968. Effective October 1, 1968.

[10] See Article 19, French Patent Legislation (No. 68-1 of January 2, 1968), *Industrial Property* (BIRPI), March 1968.

[11] See Section 22, Nordic Patent Legislation, *Industrial Property* (BIRPI), June 1968. Effective January 1, 1968.

the question, "Does your patent law provide damages for infringement before the patent issues?" we learned that all the countries whose experts participated in this survey provided this contingency.

Since the recommendation of the Commission limited recovery to "no more than a reasonable royalty"—and we hypothesized that the deterrent effect of the patent before issue would be related in some measure to the size of the recoverable damages—we asked what the character of the damages provided under foreign laws was (e.g. whether they were "in the nature of a license"). We probed the significance of this measure by inquiring whether respondents had any "statistics as to how frequently such damages" were sought or obtained.

The three prerequisites of Recommendation XVII—initial publication, an allowable claim, and notice to the infringer—are also recognized conditions of foreign law. At the time of the survey, publication in participating countries, except for Holland, was made as part of the opposition procedure and damages before issue were not classified as a license fee; however, in most instances the minimum granted was equivalent to a reasonable royalty. In Holland, under a deferred examination system, damages for the period between publication and provisional acceptance were in the nature of a license; but actual damages were available for the period between provisional acceptance and issue. In Denmark, France and Holland the experts stressed that damages for infringement were available only from the date the alleged infringer was notified.

Significantly, the experts either lacked information on the frequency with which such damages were sought or were of the opinion that they were rarely applied for or obtained, although publication, in one form or another, is the rule in all the foreign countries in which participating experts were located. Perhaps, the minimal amounts available make this remedy unattractive to potential patentees, particularly if these amounts might set the pattern for damages subsequent to issue. This raises the question as to the necessity for a damage provision before issue. Perchance, as some experts believe, it is important mostly as a psychological infringement deterrent.

Opposition and Cancellation Proceedings

Two of the more controversial recommendations of the Presidential Commission concern provision for a citation period (XI) and procedure for amending and cancelling patents (XV). Very similar to

the omnipresent opposition and cancellation proceedings in examining countries abroad, these recommendations could surely be informed by foreign experience and opinion.

Both Recommendation XI and XV provide for an *ex parte* administrative procedure in the Patent Office and for the applicant or the patent owner, as the case may be, to have an opportunity to rebut the determination and to narrow claims. Recommendation XI suggests that consideration be given only to patents or publications, cited until six months after publication, which afford notice of allowance or appeal. XV provides for a relatively high fee, and considers prior art of which the pertinency is explained in writing within three years.

From the information supplied by foreign respondents, it appears that opposition proceedings generally are initiated in their Patent Offices; and, except for Japan and Germany, cancellation proceedings are brought in separate courts, unrelated to these offices. As in Denmark and Germany, however, oppositions may usually be appealed to the courts. Although France previously conducted oppositions on pharmaceutical applications only, under the new law they will be applied to all applications. The French Patent Office, however, makes no decision on novelty; the validity of French patents is decided by specialized courts.

What do foreign experts find from their experience to be the advantages of opposition and cancellation proceedings? Most of the experts appeared to favor opposition proceedings. The most ubiquitous notion was that it strengthened the validity of patents; that is, public examination encouraged relevant art to be cited against applications, making the subsequently issued patents more secure.

Opposition proceedings were preferred to cancellation. Respondents considered the former more economical, simpler and shorter; however, a number of the experts were concerned by the delays to patent issuance stemming from opposition in certain countries. Some of the experts from Holland, Germany, and Japan even suggested the plausible idea that applications are opposed for the express purpose of procrastination. Other advantages of opposition over cancellation were also cited: Specifically, the staff of the Patent Office was more technically equipped than court personnel; the applicant acquired invaluable information on patent quality before it issued; the persistence of uncertainty due to possible challenge of issued patent; and the duplication of effort already expended by the Patent Office.

Despite delay to issuance of the patent, divulgation of new art is generally not impeded; in every case, because of the nature of the proceeding, disclosure precedes the opposition period. From the re-

sponses, it appears that the proceedings range anywhere from two to ten years and, except for Germany, the duration clusters at five years or less. The ranges for individual countries seem to be less egregious than the aggregate in the postponement of the patent grant: For example, in The Netherlands it appears to run from two to three years, Denmark from three months to two years, Switzerland and Japan from one to two years, and India about six months. Because of the backlog in the German Patent Office and in their federal patent court, certain oppositions may take as long as ten years.

Oppositions were reported as much more frequent than cancellation proceedings. According to a high ranking Dutch government official, "80 oppositions were filed in 1966." With understandable pride, he presented a breakdown: "121 cases were decided. Some of these decisions relate to cases commenced the previous year. The 121 decisions comprise 39 patents refused, 48 patents granted in part, 14 applications rejected, five oppositions abandoned, eight applications abandoned, and seven oppositions still pending." He went on to point out the relatively limited involvement of the courts: "A request for the institution of a nullity proceeding is very rare in The Netherlands. In 1966 there were three decisions on nullity. In one case the request was rejected, and in the other two cases it was accepted."

The German attitude toward oppositions was disclosed in a response from an industry representative: "As to my company, the oppositions lodged by us is about one-fifth of the number of applications we file, and the number of oppositions lodged against our published applications is somewhat less." This type of comparison struck us as particularly revealing. He then contrasted these figures with that for cancellation proceedings: "For my company, I would say one in ten years, both ways."

It is not uncommon for foreign companies to settle cancellations out of court by licensing. Opposition cases were also settled—respondents estimated from 2 to 20 percent—but the percentages reported for cancellations ran as high as 50. In certain countries (e.g. The Netherlands), opposition proceedings may be continued in the public interest by the Patent Office, even after the opposer retires, making it less likely for the parties to reach a settlement on their own accord.

There are a number of factors that tend to diminish the need for cancellation proceedings. One of the major reasons is, of course, the availability of a prior opposition proceedings. Also, cancellation proceedings are usually based on new grounds; although this requirement is not mandatory, it does reduce the number of potential litigants. Other conditions that tend to inhibit action were encoun-

tered: Cancellation proceedings range from two to four years in Germany, three to five years in France, and five to 12 years and beyond in Denmark; the combined fees per year for barrister, patent lawyer, and solicitor may run from $2700 to $4000 and over per case—an appeal might require an additional fee of from $1000 to $2000; and it may be better strategy to counter-claim invalidity in an infringement suit than to challenge the patent in a cancellation proceeding.

In one important industrial country, France, nullity proceedings can be brought in the courts by anybody who has an interest in the patent. But, as explained by a leading French advocate: "the decision is binding only as between the parties to the litigation. . . . In one case the court may hold in favor of the defendant and, in another case, against a different defendant." This expert noted that such a situation had occurred, and "both cases were appealed to the Supreme Court and both appeals were rejected."

In foreign countries the cancellation fee for third parties was not considered high, and the period for bringing cancellation proceedings was unlimited. Instituting a nullification suit in Germany, for example, costs 350 German marks. Before 1941, nullifications were restricted there to five years after grant, but are no longer so circumscribed. The only limitation in Japan is a five-year cut-off, if based on publications published or distributed in foreign countries.

Generally, new art is cited in both the opposition and cancellation proceedings. A Dutch government official, with unusual candor, explained: "In many cases the new art not considered by the Patent Office is cited by the opposing party. This may be due to the fact that an adequate search of literature was not made, or the technical literature was not available for search." A representative of the German judiciary was of a contrary opinion. He believed that "very little new art not considered by the Patent Office is presented in opposition proceedings." However, he did think that "somewhat more new art is presented in cancellation proceedings."

Deferred Examination

The brief reference to deferred examination made here supplements the larger account of foreign observations published in Vol. 11, No. 3 of this Journal.[12]

In view of the context in which Recommendation IX was made,

[12] *Supra* note 1, p. 289.

it is not surprising that recent legislation (see print by the Subcommittee on Patents, Trademarks and Copyrights of the Senate Committee on the Judiciary, a proposed substitute for S. 1042, which was distributed by Senator McClellan for comment by May 15, 1968; and S. 3892, introduced July 26, 1968 by the Senator) does not include provision for deferred examination. The Commission's Report disclosed that a "split exists among the members as to when and how such authority [for optional deferred examination] should be exercised." But even more revealing was their introductory sentence to Recommendation IX: "The Commission clearly favors a high quality immediate examination system if it can be maintained without a constantly increasing backlog."

There has been a marked abatement in the efforts to introduce deferred examination in this country since the U.S. Patent Office has been announcing substantial reductions in its backlog of applications and increasing currency of its operations. In a speech to the Patent, Trademark, and Copyright Section of the American Bar Association in Philadelphia on August 6, 1968 Commissioner Brenner said that the backlog has been cut to 189,000 cases, "the lowest point since 1954." He also informed the Section that he had inaugurated a more realistic interpretation of the term "backlog." Henceforth, the Patent Office would use the word to mean, "the number of patent applications above the normal inventory, which are awaiting first action by our patent Examiners." As eight months of applications appear to be a normal working inventory, this view should further diminish any urgency for statutory authority to provide an alternative to immediate examination.

Deferred examination has caught the fancy of certain European experts, and important industrialized nations have adopted it or contemplate doing so. Deferred examination was introduced into The Netherlands, France and Germany to permit these countries to cope with their relatively enormous backlogs. For the same reason, Japan has been making serious gestures in this direction. Their basic premise for adopting this system was succinctly expressed by a Dutch industry executive: "Inventions that have no commercial value would lapse of themselves and not burden the examination." Even the Indian expert we interviewed favored a deferred examination system. He grounded his preference on the rapidity of technological advance, the possibility of obtaining a patent more quickly, and the reduction in the number of applications examined. Danish experts responding to our queries also favored deferred examination, but there was a curious difference

of opinion on how it should be introduced: Government officials suggested that it would have to be on a Nordic basis, while industry representatives preferred it in place of a Nordic system.

Dutch experts have been very enthusiastic about their new examination system. Only 42 percent of the applicants who filed since the system was introduced in 1964 have requested examination of their applications. One Dutch patent agent estimates that approximately 60 percent of the applicants will ask for examination, saving about 40 percent. According to a Dutch government official, "The Patent Office expects a minimum reduction by one-third of novelty searches. It is also anticipated that only four-ninths of all patent applications will pass through the granting procedure."

When asked whether the reasons for introducing deferred examination in his country would also apply in the U.S., a highly regarded Dutch patent agent responded affirmatively, but then went on to distinguish: "Because of the difference of foreign-domestic mix of patent applications in Holland, as compared with the United States, the United States might only obtain a 10 to 20 percent saving in examination, rather than the 40 percent contemplated for The Netherlands." On the other hand, an eminent Danish patent agent thought it would be even more useful in the U.S., "because of the rapid development of its technology and the concomitant rapid obsolescence of its current technical arts." As an afterthought a German industry representative added this comforting assurance: "By the way, patent attorneys and patent departments of industrial companies will not be out of work in the case of the introduction of deferred examination; but work will be concentrated on more essential problems."

Protection Against Importation

Recommendation XXI of the President's Commission proposed that "importation into the U.S. of a product made abroad by a process patented in the U.S. shall constitute an act of infringement." Since such an unauthorized importation does not now constitute infringement, a patentee is obliged to institute proceedings under the Tariff Act of 1930, if he wishes to have a product excluded. Experience under this Act, however, has been quite discouraging, due to the type of economic evidence required. (19 U.S.C. 1337[a].)

The Patent Reform Bill (H.R. 5924) limited the application of Recommendation XXI to cases where "patent protection for the

process is not available in such country [country of product manufacture]." Commissioner Brenner opposed the liberal importation provision of the Presidential Commission because "there has been no showing of a compelling need for such a provision. Moreover, a broad importation provision would appear to pose an unacceptable burden to importers who would be faced with the costly task of determining by what process the products they imported were made."[13]

The Bar Associations generally supported Recommendation XXI, but were opposed to the "crippling amendment" added in the Patent Reform Bill. Frank B. Pugsley, President of A.P.L.A., testified before a Subcommittee of the House Judiciary Committee, respecting H.R. 5924 on June 8, 1967, that the amendment "would invite a potential infringing user of a new process to seek out a country in which patent protection was available but either had not been obtained or was ineffectual." The aggregate persistence of the Bar and others, apparently, has been effective: The most recently proposed legislation (S. 3892 introduced by Senator McClellan on July 26, 1968) includes a provision protecting a patentee against unauthorized importation (see 271[b]) sans the unpopular qualification.

All the countries represented in our sample had provisions barring the importation of products made abroad on a domestic patented process; however, there were some technical differences. In Holland, for example, only if a product is claimed as prepared by a novel Dutch process may the importation of the product by prohibited; but "substances" may be barred from importation even if there is no such claim in the patent, because "substances" are not patentable in Holland. A substance, under Dutch law, is defined as a fluid material without definite shape.

"Approximately 80 percent of infringement actions are brought to protect against" trespass on a domestic process "used abroad for the manufacture of products imported into Holland," according to a well-known Dutch patent agent. A company executive from the same country, when asked for his personal experience, used the well-known Italian statistic to convey the activity in this area: "Most of the pharmaceuticals imported from Italy and most of the chemicals imported from the U.S. are subject to this provision." He also directed our attention to the antitrust and to the practical problems involved: "It has been charged before the European Court of Justice that it

[13] Section: "Recommendation No. XXI: Importation," from Statement of Commissioner Brenner before Subcommittee No. 3, House Judiciary Committee, February 28, 1968.

prevents the free flow of goods. . . . The provision does not work too well because it is very difficult to furnish the proof that a product has been made by carrying out a protected process. A majority of interested people in Holland want to amend the law by introducing patents on substances per se. However, there is still some opposition." French and German experts, on the other hand, report that there are relatively few importation cases in their countries.

The burden of proof appears to play a more than casual role. The importation into Denmark of a product made on a process patented in Denmark is prohibited, but the burden of proof is on the patentee. When we asked a Danish company executive how effective the protection was, he replied without qualification: "unsatisfactory . . . as it may be difficult or impossible to prove that an article has been produced by a patented process." Although no statistics were available on infringements stemming from importation, a Danish government official ventured that "there probably are very few, since few patent cases are tried in the Danish courts." The importance of the burden of proof to European experts is evident from the concern voiced in a letter from a Danish industry association executive, following his interview, that "importers will have to produce proof that no U.S. process patent has been infringed by the foreign manufacturer," if Recommendation XXI is enacted into law. His solicitude is, of course, directed to the effect of the proposed American provision on Danish exports to the U.S.

Under German law it is assumed that a novel product made abroad by a process patented in Germany was made by that process. This is true in Switzerland and also under the new French law. The Indian expert reported the burden is, likewise, on the importer in the new Indian bill. Despite the difficulty of proof, the European provisions on this subject appear to be satisfactory, particularly where the burden is on the defendant.

The reply of a French industry executive impressed us as realistic: "This provision works fairly well, but it is rather difficult to try such cases because of the problem of obtaining evidence. This has been accomplished in certain chemical cases by the utilization of a very sensitive analysis so as to detect traces of a catalyst in the product. Generally the provision works well with people of good will." This statement was made when the burden of proof was on the patentee, before the new French law went into effect. A colleague, in German industry, concluded his remarks with the point on which all the experts agreed: "The provision is extremely important for the protection of inventions in the pharmaceutical field as long as Italy and other

countries do not grant adequate patent protection or patent protection at all in this field."

International Cooperation

> The Commission believes that the ultimate goal in the protection of inventions should be the establishment of a universal patent, respected throughout the world, issued in the light of, and inventive over, all of the prior art of the world, and obtained quickly and inexpensively on a single application, but only in return for a genuine contribution to the progress of the useful arts.
> To this end the Commission specifically recommends the pursuit of: (1) International harmonization of patent practice, (2) the formation of regional patent system groups, and (3) a universal network of mechanized information storage and retrieval systems.

The long range goal explicit in the above recommendation is clear: a universal patent. So revolutionary is this change that few experts took the proposal seriously, at least for the foreseeable future. This skeptical attitude tended to limit any constructive discussion and occasionally resulted in actual indifference. However, the short range goals, such as harmonization of international patent practice, usually engendered optimism, and evoked a more productive response. For a larger report on the views of foreign experts on international cooperation see the previous paper on this subject, "Notes on Informed European Opinion Regarding Industrial Property–Summer, 1967," in Vol. 11, No. 3 of *IDEA*.

Two questions asked the foreign experts were particularly relevant to international cooperation: Specifically, (1) "For the purposes of such cooperation, is it *essential* that there be substantially identical patent laws?" and (2) "Is it *necessary* to have a first-to-file procedure if a country is to participate in the proposed (BIRPI) Patent Cooperation Treaty?"

In reply to the first inquiry, responses ranged from "no need" to "essential," depending upon the interpretation the particular expert placed on the term "international cooperation." Some of the respondents referred to a world patent, and then opined that for such an instrument it would be essential to have substantially identical patent laws. Where allusion was made to a less fundamental type of accord, sentiment differed–but the majority of the answers considered identical patent laws unnecessary. Moreover, experts advocating identity, usually limited it to certain features of patent law or practice required to accomplish a specific objective. The following are some examples of the way in which the limitations were expressed:

In the Netherlands, from a quasi-government official—"For the purpose of novelty searching . . . a common definition of novelty would be extremely important."

In Switzerland, from an industry executive—"In the long run, yes; if the aim is supranational (regional) patents to be based on unified law and procedure."

In Germany, from a government official—"It is essential that a single international application be made available so that only one search will be required for each invention. The first step would consist of unification of formalities. The second step would require a unification of the requirements for novelty. The third step would consist of a single examination for several countries. Substantially identical patent laws are needed, (e.g. patentability of invention). It is not necessary that the procedural requirements be the same in different countries."

In France, from a government official—"For the purpose of cooperation extended to a certificate of patentability (as in the second part of the BIRPI Treaty) it is essential that there be substantially identical patent laws relating to novelty, inventive step and subject matter."

In Denmark, from a patent agent—"Unless the fundamental concepts such as invention, claims, prior art, inventive merit, et cetera are the same it will not be possible to provide for international cooperation. It was precisely for this reason that the new laws of Denmark, Norway, Sweden and Finland were almost completely harmonized, in view of the future Nordic Patent Cooperation envisaged in Chapter III of these laws."

From such responses, it appears that the emphasis on harmonization, when expressed, is primarily on classification, formalities (e.g. patent application form, including claims) and requirements for novelty and patentability (which also involves the nature of the system, such as registration vs. examination and first-to-file vs. first-to-invent). Identical procedural requirements after the grant of the patent are not thought essential—these would include provisions relating to enforcement, duration, annuities, compulsory licenses, et cetera.

In answer to the second question, the respondents demonstrated little agreement on whether it was "necessary to have a first-to-file procedure if a country is to participate in the proposed (BIRPI) Patent Cooperation Treaty." But the replies to both questions often contained a favorable gratuitous reference to harmonization and to international agreements. No optimism was encountered, however, for group patent arrangements within regional groupings of nations.

Concluding Remarks

In answering the questions, the foreign experts disclosed certain differences in their understanding of the U.S. patent system; accordingly, their answers reflect both their interpretation of their own systems and their sometimes unique interpretation of the prevailing U.S. system.

First-to-File and First-to-Invent Systems

Respondents believe that the first-to-file system contributes more to "judicial certainty" and affords a more accurate evaluation of the prevailing patent situation than the first-to-invent system. One reason that pervades most of the replies is that a patent may be invalidated in the U.S. many years after grant through interference proceedings. This reason was offered without any reference to the one-year time limit imposed by 35 U.S.C. 135 (b) for copying claims of an issued patent; curiously, our survey did not disclose as much concern with a time limit for initiating a cancellation proceeding abroad. Notwithstanding provisions, such as that in Holland, making invalidity of the patent prospective only (*ex nunc*) the continuing possibility of invalidating the patent by means of cancellation under a first-to-file system, is likely to cause as much, or more, difficulty than interference in evaluating the long-term patent situation. In this connection, American executives and inventors (in another study on the Commission's Report conducted by the Institute) expressed a uniformly unfavorable reaction to extending cancellation proceedings—a majority of the respondents questioned embracing such proceedings at all—for more than one year after issue.[14]

Grace Period

The opposition expressed by the majority of European experts to a grace period appears to be predicated, in large part, on the fear that it would preclude a corresponding valid patent in a European country which had no corresponding protection. The answers, however, indicate that a six months' personal grace period is acceptable, provided

[14] See *IDEA*, Vol. 12, Nos. 2-3 (Summer-Fall 1968) "Some Modifications to the Recommendations of the President's Commission on the Patent System," by John C. Green & Gideon Schmuckler, pp. 753-763.

other industrial countries adopt a similar provision. American corporations are reported to ignore, quite often, the possible effects of use in the U.S., during the grace period, on the corresponding patent in countries which have no such period.

Europeans appear to be more concerned with international obstacles affecting patent protection; perhaps, because Europeans consider the European market a single entity and are, therefore, more susceptible to a loss of patent protection in other continental non-grace period countries, and its consequent effect on trade among themselves. In any case, incentive for a grace period will probably remain quiescent as long as European corporations are content to test their inventions in secret.

Preliminary Applications

There are no provisions in continental Europe patent systems for preliminary applications. The more stringent the prohibition against supplementing a patent specification, without losing the advantage of the earlier filing date, the greater interest in a preliminary application; liberal provisions for filing applications for patents of addition has a tendency to reduce the allure.

Publication and Infringement

From our information it appears that publication 18 months after filing is a compromise between the interests of the applicant and that of the general public, including competitors: Publication is directly related to possible infringement action. A procedure providing for service of actual notice by the applicant on the alleged infringer would seem desirable—perhaps, by a certified copy of the application. Damages for infringements would then be determined from the date of actual notice.

Opposition Proceedings

The answers indicate that an examination for prior art carried out by a party having an adverse interest is likely to be thorough. While this may be correct, there is also sentiment that one is not likely to undertake an opposition proceeding unless the potential patent ap-

pears to challenge or interfere with a personal industrial or commercial interest; in contrast, a search carried out by a government agency, such as the Patent Office, would be prompted by broader considerations, more representative of the public interest. Some take a more neutral position: the two searches are not mutually exclusive; while often overlapping, they complement each other. Whether the Patent Office tends to be lax in its search, if opposition proceedings are available at a later stage, cannot be definitively ascertained from the answers; even the proportion of successfully opposed patents (on the basis of art which could or should have been cited by the Patent Office in the first instance) is not persuasive without comparable data on how effective the search was before the institution of opposition proceedings in that Office.

The existence of opposition proceedings does relieve the court of a certain share of the burden, shifting it to an administrative body in closer relation to the Patent Office, such as a Patent Board. A shift in time also occurs: the challenge to the patent takes place at an earlier stage, after publication of the patent. Opposition proceedings also shifts a portion of the searching task from the government agency to the private party challenging the patent, while leaving the decisional, or ruling, aspect of the case to the agency. From the point of time, opposition proceedings are a challenge to the patent intermediate between examination of the patent application and cancellation, or other court proceedings.

As the answers clearly indicate, examination on the merits, while the application is pending, has no substitute for contributing to the early evaluation of the patent situation. A time limit for bringing opposition and cancellation proceedings, though not necessarily of the same length, also appears to contribute to earlier definitive evaluation of the patent situation. Our examination leads us to believe that before a country institutes an opposition or cancellation procedure, attention should be directed to the economic, administrative and legal implications of the time-shifting in the challenge to the patentability of the invention—and to the reapportionment in the burden of work between the private sector, the government agencies, and the courts.

Deferred Examination

We learned that deferred examination is embraced for the same reason by countries at opposite procedural poles of the patent system; but one group of countries (e.g. Holland and Germany) wants to

retain the advantages of the examination system, while the other (e.g. France) wants to *gain* them. Both groups are convinced that they cannot cope with the tremendous influx of patent applications, particularly those stemming from abroad; hence, the attempt to eliminate the examination of, at least, a portion of the applications filed. The recognized benefits of immediate examination—even the Presidential Commission states that it "favors a high quality immediate examination system if it can be maintained without a constantly increasing backlog"—and the formidable opposition of certain highly regarded European experts to deferred examination, give prominence to the advantages of an immediate examination system. The economic cost of such a system is appreciated by our respondents. If the United States—or any country—is able to satisfactorily contain the accumulation of its pending applications, the experts appear to strongly favor immediate examination.

A crucial difference between the immediate and deferred examination systems concerns the party on whom the responsibility rests for initiating examination, or of withdrawing the application—the party representing the public interest (the Patent Office) or the private party. The answers do not refer to this basic difference between the systems; perhaps, leading some foreigners to overemphasize the fundamental disparity between them.

Imports and Infringements

The experts reported that the provisions in their laws for enforcing a process patent against an importer of a product made by that process are not conditioned on the availability of patent protection in the country of origin of the import. Also, whether a patentee has availed himself of such foreign provisions, if they exist, does not determine his rights against the importer. Evidence of this type of infringement is difficult to obtain and, therefore, transfer of the burden of proof to the defendant is a strong assist to the patentee.

Areas of International Cooperation

When the question of international cooperation for novelty search was raised, the experts appeared to be interested in the form and nature of claims, and whether a single or a combination of disclosures are properly citable prior art. A thorough search for novelty would be

enhanced by harmonization of the claims to minimize the differences between the peripheral type of claim (as in the United States) and the central type (as in Europe). Agreement on the number of disclosures properly citable as prior art is also recommended. Until there is concord on such features, it appears that the efforts of an international search system would have to be supplemented by those of countries having the most stringent novelty requirements.

Reduction to Practice Abroad

One of the objections voiced to the first-to-invent system was that it discriminated against the foreign applicant because he is not permitted to show his date of reduction to practice abroad. The Administration has proposed to retain a priority contest and allow applicants, both foreign and domestic, to establish a date of invention by proof of acts in foreign countries. The foreign applicant would be permitted to establish a date one year prior to his earliest effective U.S. filing date. Thus, he could establish a date of invention not earlier than one year prior to his Convention filing date, by proof of acts in any country.

Foreign reaction has been highly favorable. Those with whom this matter was discussed appreciated the practical and evidentiary problems raised, but, nevertheless, appeared willing to accept them.

For foreigners, including U.S. subsidiaries abroad, the effective date of such provisions is important. Presumably, foreigners would be permitted a date of reduction to practice abroad prior to the effective date of the proposed U.S. Patent Act. Thus, the acts relating to a reduction to practice date may be occurring now.

If the Administration's proposals are enacted, foreigners filing in the U.S. would proceed under two systems: a first-to-invent system in the U.S. and a first-to-file in Europe. Some experts believe that this dual exposure would be conducive to greater accord, in the long run.

Harmonization

In the introduction to the Report of the President's Commission, a major purpose is set forth: "To make U.S. patent practice more compatible with that of other major countries, wherever consistent with the objectives of the U.S. patent system." When considering amendments to the U.S. patent system, some believe that the latter part of this statement is too often obscured; that the primary purpose

of the U.S. system is to serve our national requirements; and that this objective should be pursued at home and abroad. Is the feeling that there is insufficient dedication to national objects in our international industrial property dealings exaggerated? Do we lack a clear perception of these objectives? Are we out of step with the changes that have occurred in our own economy? Has our system been less responsive to change than have other patent systems? What remedial legislation, if any, is actually needed?

From our analysis of informed European opinion, it appears that the various European modes of patent practice have been shaped by the economic, judicial and social needs and objectives peculiar to these countries. Their patent laws are now in a transitional period. Supranational industrial property influences (group and international patent proposals), and increased industrial activity, have exacerbated the rate of change; Europe has been undergoing a great economic metamorphosis and patent laws are mutating to conform.

Despite limited appreciation of the fact, harmonization of patent laws appears to be less an objective than a result, incident to changing industrial, economic, political and social needs and realities. When these factors are compatible among countries, their common interests and background will be conducive to the development of sympathetic, if not similar, patent systems. While the current international climate will encourage consideration of patent ideas that appear to be mutually advantageous, their acceptance will be based primarily on the national interest.

APPENDIX

BASIC INTERVIEW GUIDE WHICH WAS ALSO USED AS THE MAIL QUESTIONNAIRE (AND LETTER ACCOMPANYING THE QUESTIONNAIRE) FOR FOREIGN PATENT EXPERTS.

The interview guide was employed for personal interviews in Europe during the summer of 1967. The letter and questionnaire were mailed to additional foreign experts in the winter of 1967-68.

October 5, 1967

Dear Mr. _____:

Mr. _____ suggested that we send you a copy of the enclosed questionnaire. This questionnaire relates to one part of a four part Institute project seeking to illuminate the effect of certain of the major proposals made in the recent report of the President's Commission on the United States Patent System. In this inquiry we are gathering information on the experience of experts in other countries with provisions in the laws of their countries that are similar to the recommendations in the Report of the President's Commission. We would

appreciate it if you would complete the questionnaire and return it to the Institute at your earliest convenience.

In 1965 President Johnson established a Commission to examine the United States Patent System whose broad objective was to recommend measures to keep the system abreast of current and foreseeable needs of our society. The Commission deliberated for almost two years before presenting its findings to the President. As you know, they found that patents play a significant role in the country's economic growth. The Commission noted a number of areas where, in their opinion, departures from current practice would be beneficial. Acceptance and enactment of some of these changes would require legislation.

The PTC Research Institute is dedicated to an objective analysis of the patent system and its effects on the economy. Accordingly, this report of the Commission generated a special study by the Institute of the potential effects of those recommendations which appear to be substantial departures from current United States practice.

We realize that it will take a little time and effort to answer the questions in the questionnaire. With this in mind, we have tried to keep the questions as simple as possible and to limit them to essential information. If you are unable to reply to all the questions, please complete those you can since it is far better to have your partial return than none at all.

We assure you that your reply will be kept in confidence and any publication will be in the form of combined data, unless you direct otherwise. The research report will be published in *IDEA,* the journal of the Institute.

With best wishes,

Sincerely,
L. James Harris

AREA A—First to File

1. What rights does a party have that has made the invention but has never filed a patent application?
2. What are the advantages of your first to file system?
3. What are the disadvantages of your first to file system?
4. In your first to file system does the application have to be by the original inventor?
5. What rights does the first inventor have? The patent holder have? As between themselves, and as to the general public?
6. Do you have any statistics or personal experience concerning the number of times the question of rights between the first inventor and the patent holder comes up for determination?
7. What are the rights of the second party to file? Suppose he discloses or claims a *broader* concept of the invention than the first to file?
8. Is there a provision in your Constitution that guarantees (or gives) certain rights to the inventor similar to that in the United States Constitution?
9. For purposes of international cooperation do you think it is *essential* that there be substantially identical patent laws? Why?
10. Is it *necessary* to have a first to file procedure if a country is to participate in the proposed (BIRPI) PCT treaty?

AREA B—Grace Period

1. Do you have a grace period in your patent law? If so, what kind?
2. How do you test the commercial value of the invention if you have not yet filed the patent application? How customary is this?

3. Do you have many problems in the evaluation of the invention prior to filing of the application? Please explain.
4. What is the prevalence (how many) of patents challenged on the ground of a public disclosure prior to filing? Have these challenges generally been settled by the license route?
5. Do the courts distinguish between experimental and public use (or disclosure)?
6. How do you protect improvements to the basic invention?
7. Does the answer to question 2 relate to both process and product claims?
8. (a) Do you think that a period allowing for evaluation of the invention or for testing the market would be desirable prior to filing application for patent? Please explain.
   (b) What length period?
   (c) Does the length of the period relate to (or depend on) the type of technical field (electronics, drugs, coatings, paints, etc.)?
   (d) Does the length of the period relate to the type of claim (e.g. process, product)?
9. Was there any discussion of the desirability of a grace period in your country? What? Where? When?

AREA C—Opposition and Cancellation

1. Where do opposition and cancellation proceedings take place (Patent Office or courts)? What are the advantages and disadvantages thereof? Please explain.
2. Can a party challenge a patent in court on the same ground he opposed it in the Patent Office?
3. Do you have any figures (percentages) regarding the number of opposition and cancellation proceedings started?
   What proportion of new art (not considered by the Patent Office) is cited by the opposing or cancelling parties?
4. Do you prefer opposition proceedings or prefer to go to court?
   (a) from the point of view of defendant. Why?
   (b) as plaintiff. Why?
5. What percentage of opposition or cancellation proceedings are settled out of the Patent Office or court? Settled by licensing?
6. What generally is the number of parties in an opposition or cancellation proceeding—two or more?
7. Give the average duration of your opposition and cancellation proceedings.
8. Give the approximate cost of such proceedings (per year).
9. Your opposition proceedings are confined to
   (a) what period after publication of application?
   (b) prior patents and publications?
   (c) ex parte?
10. Is your cancellation fee for a third party high?
11. Is the period to bring a cancellation proceeding limited?

AREA D—Interpretation of Claims and Effectiveness of Examination System

1. Do you think that international cooperation is predicated on a harmonization of claims?
2. What is the purpose and meaning of claims?

3. Why has your country adopted (or is considerinig) examination of patents in certain technical fields?
4. What has been your experience in these areas?
5. In what forum (patent office, court, or other) is the scope of the invention determined?
6. Do you consider that patents in your country are effective? Why?

AREA E—Novelty and Obviousness

1. Is novelty of an invention determined by comparison of the "invention" with a *combination* of prior art disclosure or a *single* disclosure?
2. Is *judicial* certainty promoted by absolute novelty? Why?
3. Is *judicial* certainty promoted by examination? Why?

AREA F—Deferred Examination

1. What are (or would be) your reasons for introducing a deferred examination system in your country?
2. What is your experience in this field (figures, statistics, foreign-domestic applications, etc.)?
3. Do you think that the reasons for your introducing it would also apply to the United States? Why?

AREA G—Preliminary Applications

1. Does your patent system provide for preliminary applications or do you expect to introduce such a provision?
2. Does (or will) "every feature recited in the claims" of the complete application have to be disclosed in the preliminary application?
3. How frequently is the preliminary application used?
4. How effective has it been? Please explain.

AREA H—Protection Against Importation

1. Can the owner of a domestic patented process obtain protection against the importation of products made abroad on that process?
2. Have you had any experience with the export to the United States of products made in your country on a United States patented process owned by someone other than the exporter? Please explain.
3. Do you have any statistics or personal experience with respect to question 1?
4. How well does the provision in your law protecting against importation work?

AREA J—Early Publication of Patent Application

1. What would you consider a desirable period for pendency of an application in the Patent Office before publication? From applicant's point of view? From the other party's point of view?

2. Do you think that this period applies equally to all technical fields?
3. What is the general practice with respect to question 1 now?
4. Does the scientific community study patents or patent applications as a type of disclosure of scientific information?
5. If patents or applications were published earlier would they be more likely to be studied by the scientific community?
6. Are publications made before examination and allowance of a claim?

AREA K—Foreign Public Knowledge, Use and Sale Included as Prior Art

1. Is foreign public knowledge, use and sale included as prior art in your country?
2. How often have you relied on prior foreign use as prior art against a patent?
3. What do you (or your courts) mean by "public knowledge"?
4. Have you found the testimony of foreign nationals with respect to foreign use
   (a) difficult to obtain?
   (b) prejudicial to domestic applicants?
   (c) prohibitively expensive for small companies to obtain?

AREA L—Advisory Committees

1. A basic objective of the patent system is to contribute to the growth of the economy. Is here any liaison or support (committees, Advisory Council, technical consultants) from industry or the public connected with the Patent Office which also has this broad objective?
2. If so, how effective is it (or are they)?

AREA M—Burden of Persuasion

1. Is there a burden on the applicant to persuade the Patent Office that a claim is allowable?

AREA N—Damages for Infringement before Patent Issues

1. Does your patent law provide damages for infringement before the patent issues?
2. If so, is it in the nature of a license?
3. Do you have statistics as to how frequently such damages are sought or obtained?

AREA O—Patent Office Finance

1. How is the Patent Office financed and does it make a profit?
2. Does the Patent Office set its own fees?
3. How does the economic value of your patent system influence the establishment of fees for running your patent office?

Foreign Inventors' Behavior Under U.S. and Foreign Patent Systems

L. JAMES HARRIS* AND GENE L. FINN**

PURPOSE AND SCOPE

AS PART OF THE INSTITUTE'S PROJECT on the recommendations of the Presidential Commission, a questionnaire survey of foreign inventors was made to determine the behavior of such inventors under provisions of foreign laws which are similar to those proposed by the Commission, and to compare that behavior with their conduct under the U.S. patent system. Included in the survey are all foreign inventors in a 2 percent sample of U.S. patents issued in 1966. Another report by the Institute published in this issue of *IDEA* examines the behavior of American inventors derived from a 2 percent sample of patents issued the same year.[1]

* Director, The PTC Research Institute; Professor of Law, The National Law Center, The George Washington University.

** Research Associate, The PTC Research Institute; Financial Economist, Securities & Exchange Commission. The Security and Exchange Commission, as a matter of policy, disclaims responsibility for any private publication by any of its employees. The views expressed herein are those of the author's and do not necessarily reflect the views of the Commission or of the author's colleagues upon the staff of the Commission.

[1] The questionnaire on which this report is based appears at the end as an

The survey is directed to foreign inventors who were successful in obtaining a U.S. patent; thus the findings, from a statistical standpoint, must be limited to that class of inventor. Also, because we are applying statistical methods in dealing with an approximate 2 percent sample, there are potential statistical errors associated with the percentages estimated. Questionnaires were sent to 431 inventors with 278 inventions and responses were received from 85 inventors covering 74 inventions. The cost to inventors of mailing replies from abroad to the detailed questionnaire was relatively high; and a language barrier probably had to be overcome by many respondents. Under these circumstances, the response is considered unusually good.

Characteristics of Survey Participants

In view of the experience with patenting in more than one patent system which this sample of inventors represents, their opinion and behavior cannot be considered lightly. Generally speaking, respondents are not first-time patentees; out of the 85 individuals with 74 different inventions, 74 have other patents. For ten, it is their first patent and one did not answer the question. Only one of the ten first-timers are among the 22 who are joint inventors. Four of the ten first-time inventors are from Canada. Only three of them indicate that they have patent applications on other inventions in their own country's patent office.

Overall, the respondents are widely distributed, located in many countries, including Canada, Mexico, Japan, England, Germany, Switzerland, and France. Table 1 shows the number of responding inventors by country of residence.

The inventors are, in nearly all instances, company employees who developed their invention in connection with their work; over half, 49, made their invention because of job demand. Eighty-seven percent of the inventions are developed by company employees and 12 percent by self-employed persons. It is not surprising that a high percentage of patents obtained abroad originate with company employees: financial and other support furnished by the company (as well as employee hiring and training practices) probably increase the likelihood of their

---

appendix. It is a condensed version (with the addition of inquiries directed to domestic experience of foreign inventors) of the one utilized for the report on American inventors. See Sanders, B. S., "Observations on the Presidential Commission's Recommendations for Recasting the U.S. Patent Laws," page 1069 of this issue.

TABLE 1
NUMBER OF RESPONSES BY COUNTRY OF INVENTOR

Country	Number of Patents	Number of Inventors
Canada	9	11
England	14	17
France	6	7
Germany	15	16
Japan	8	8
Other Countries*	22	26
Total	74	85

* Other countries from which inventors responded are The Netherlands, Scotland, Switzerland, Belgium, Sweden, Mexico, Italy, Israel, Hungary, and Czechoslovakia.

quality creative output. Although 58 inventors attribute their invention to studies in which they are engaged and/or to the recognition of the problem, many of these same inventors, 33, also indicate that more income, the desire for advancement, as well as job requirements, are incentives. Of the 82 inventors answering this question, 28 or approximately one third, do not cite a monetary or job reward as the incentive; however, only six of the 85 inventors specifically state that the invention is not associated with their work. Incentives to invent, in most cases, reflect a desire for some type of monetary or job-related reward, although few gave more income alone as the stimulus.[2]

In most instances, 85 percent, the domestic patent on the invention is assigned. Of those patents that are assigned, 82 percent are pursuant to employment contracts. Assignment, in nearly all cases, is before filing; only three inventors indicate that assignment took place after filing.[3] With respect to the assignment of U.S. patents, the incidence, as expected, is about the same as for assignment of domestic patents.

Many reasons are given for patenting inventions in the United States; but the general theme of protection from competition, in a major potential market, runs through most of the answers. The reasons stated are:

[2] Compare with incentives reported by Joseph Rossman, "Rewards and Incentives to Employee-Inventors", *IDEA,* Vol. 7, No. 4 (Winter 1963-1964), pp. 431-460.

[3] This characteristic appears to agree with the propensity for assigned patents to be assigned before filing. See Joseph Rossman and Barkev Sanders "Patent Utilization," *PTC J. Res. & Ed. (IDEA)* Vol. 1, No. 1 (June 1957), p. 79, Table 1.

Reason	Number of Inventions
1) Patent department decision	12
2) Probable market	27
3) Company policy to apply in competing countries	13
4) To spread benefit of invention	1
5) Increase value of patented invention	1
6) Related patents	4
7) Sold in United States	3
8) Other economic reasons	7
9) No response	6

The United States is rarely the only foreign country in which patents are obtained. Ordinarily, Western European countries, Canada, and Japan are included; and, in many instances, protection is obtained in a large number of countries. The clusters of patents procured appear to reflect the notion that protection should either be sought in major markets only, or it should be sought in many markets. Some responses suggest a broad selection of countries for patenting. One inventor, employed by a large Swiss chemical company, reports that protection for his invention was sought, "In all the major countries worldwide." A French inventor appeared to show even less discrimination. He pursued patent protection in "Western Europe, Eastern Europe, Asia, South America and North America." Such observations clearly indicate the esteem in which these inventions were held by their sponsors.

In almost all cases, the patents obtained were still in force and the use or potential for use very good, possibly reflecting the recent vintage of the sample. Relatively few respondents, 21 percent, had allowed any of their non-U.S. patents to lapse. Among those who did, the forfeiture usually occurred for only one or two of all patents obtained on the particular invention. In over one out of five inventions, the U.S. patents were being currently used in production, see Table 2, and in many other cases, "use in production" was expected. The ratio for current use in the inventors' countries is over twice that of the U.S. patent, but the combined current and anticipated use is 60 percent for the U.S. patent compared to 81 percent for the domestic patent.[4]

[4] This conforms with the finding of the Institute's Patent Utilization Study that, by the time they expire, 55 to 65 percent of assigned patents have been used in production (*Supra* note 3, p. 75). The higher utilization rate in our sample is probably due to the better quality of inventions for which foreign patents are sought.

TABLE 2
CURRENT AND ANTICIPATED USE OF PATENTS

Item	Number of Patents	
	U. S.	Domestic
Currently Used in Production	15	35
Possible Future Use:		
Definite Indication	7	8
Some Indlcation	19	14
No Indication	20	8
Do Not Know	7	5
Total number current and anticipated use in production	41	57
Total usable responses to question	68	70

Thus, the foreign inventor is an important user of U.S. patented inventions; and, because of his experience under both U.S. and his own patent system, his approach to those systems should shed light on whether it would be desirable to make certain changes in the U.S. patent system.

EXPERIENCE WITH A FIRST-TO-FILE SYSTEM

One of the key recommendations of the President's Commission on the Patent System concerns the granting of a patent to the first to file an application. Since the Commission published its report, a number of proposed patent "reform" bills have included various versions of this proposal. Almost every discussion on the different forms suggested for this recommendation has revealed strong resistance: If it be adopted, opponents prophesy dire consequences for the American patent system; proponents of the recommendation, on the other hand, vigorously contend that the proposal is essential to the progress of our system and to international harmonization. This survey of a statistical sample of foreign inventors receiving U.S. patents in 1966 was undertaken to provide experience of innovators who would be likely to be familiar with first-to-file provisions. In every case, the foreign inventor had sought and obtained a domestic patent under a first-to-file system, except for the Canadians.

The behavior and opinion of these foreign inventors that have used

both systems indicates that change to an unmodified first-to-file system may have certain disadvantages. For instance, it appears that inventors may feel compelled to file as early as possible, after conception of their idea, even though some evaluation and market testing may be needed to determine the invention's usefulness; thus, much wasted time and expense may result for both the inventor and the Patent Office. Such an adverse evaluation was expressed by a Swiss inventor in the following way: "I think a period for testing and evaluation is desirable since it would certainly facilitate the decisions to take and reduce unnecessary expenditures." The pungent response of an English inventor is also worth repeating: "Patent protection is too expensive. The preliminary protection period of 1 year too short. Time for completion [of invention] too long."

In order to assess the effect on inventors, based on actual experience of a first-to-file system, the foreign inventors were asked how many months elapsed from conception to filing in their own country and in the United States. The time interval elapsing between conception of the invention and the date of filing of a patent application is substantially longer for U.S. patents than it is for filing in the country of the inventor. The frequency distributions in Table 3 illustrate this difference: For example, 32 patent applications were filed in six months or less in the inventor's country, but only eight were filed in six months or less in the United States; for 20 of the 32, a U.S. application was not made until 12-18 months from the invention's conception date. Some of the inventors did not answer this question, but of those responding, 75 percent took longer to file in the United States. Of the remaining 15 inventors who did not, six were from Canada, a country which does not have a first-to-file system. Of the five inventors that waited longer than two years to file in their own country, only one was from Canada.

TABLE 3
NUMBER OF MONTHS ELAPSING BETWEEN
CONCEPTION OF INVENTION AND FILING DATE

Number of Months	Domestic Filing	U. S. Filing
6 or less	32	8
6–12	16	10
12–18	4	22
18–24	5	12
over 24	5	10
Total response to question	62	62

Responses to questions concerning the date of first use of the invention, correlated with relevant filing dates, provide evidence that a system which places too much emphasis on early filing may not be without its costs. Although many inventions were in use at the time of the survey early this year, 50 percent were not in use. Several of these had domestic filing dates five, six, and even seven years old. In nearly all instances, 93 percent, the U.S. filing was made no later than 12 months after the domestic filing.[5] Of those inventions upon which a domestic filing was made within six months of the conception of the idea, 57 percent had not yet been used and only 32 percent had been used within two years after the filing date. In contrast, among those that filed a domestic application more than six months after conception, only 46 percent were not yet in use and 42 percent were in use within two years after the filing date. Thus it appears that those inventors who file early require more time to put their inventions into use; moreover, there is less likelihood that they will be utilized, since well over half of the inventions were not in use two years or more after domestic filing.

On the other hand, some inventions were being used prior to filing and others were put into use shortly after the domestic filing, but prior to filing in the United States. The experience of these inventors indicates that the time between conception of an idea and the use of the invention varies considerably and that domestic filing nearly always occurs prior to use and in many instances shortly after conception of the idea.

Reasons for Delay in Filing

The question was asked: "If there was a delay in filing, in your own country or in the United States, what accounted for this delay?" Information on the causes of delay, as reflected in the actual experi-

[5] This percentage is not derived from Table 3. The table does not show time differences between domestic and foreign filing.

The high percentage of U.S. filing within a 12-month period of the domestic filing is largely due to the advantages offered by the Paris Convention for the Protection of Industrial Property which "provides for the right of priority . . . on the basis of a regular first application filed in one of the contracting States, [on which] the applicant may, within a certain period of time, [12 months], apply for protection in all the other contracting States; these later applications will then be regarded as if they had been filed on the day of the first application." Paris Convention, of March 20, 1883, for the Protection of Industrial Property, BIRPI: United International Bureaux for the Protection of Intellectual Property (General Information) 400 (E) —English edition, pp. 10-11.

ence of the respondents, could shed light on the need, if any, for a more flexible period before filing than provided by a first-to-file system. When delays in filing occur, they are apparently caused by a need for testing and evaluation of the invention or by operational problems of those applying for patents. Many did not respond to this question, indicating that they do not know the answer, possibly because, in the normal course of events, the application was processed by the patent department. The reasons given for delays are:

	Number of Inventors
1) Congestion in company patent department	5
2) Patent counsel inexperience	2
3) Time consuming procedures involved	6
4) Inventor's ignorance about patents	1
5) Initial testing, evaluation, and time needed to perfect invention	18
6) No delay	12
Usable inventor responses	44

The question asked for reasons for delays in filing in the domestic country *or* the United States; and, therefore, it cannot be determined definitely whether some reasons apply only to the domestic or to the U.S. filing. In nearly all cases, however, the reasons given appear equally applicable to both filings: initial testing, evaluation and time needed to perfect invention, congestion in company patent department, and patent counsel inexperience. Only two respondents specifically differentiated between the U.S. and domestic filing, indicating the U.S. procedures cause the delay.

Need for a Grace Period

The inventors were also asked: "How do you test the commercial value of the invention (if you have not yet filed the patent application in your own country, but propose eventually to do so)?" Approximately 60 percent of the respondents to this question attempted to test the invention's commercial value before filing; several, however, indicated that the commercial feasibility was obvious and, hence, they did not need to test. Among those that apparently needed some additional

evidence of usefulness, 45 percent relied upon general market evaluation, sometimes supplemented by market surveys; 27 percent relied upon experimental testing; but only 10 percent tested the commercial feasibility of their invention by direct attempts at marketing. The emphasis on indirect, as opposed to direct, methods of testing before filing probably reflects the legal requirements of a first-to-file system. This impression is also conveyed by the response to another question: "Was your invention actually made (in the laboratory or otherwise) in order to test its feasibility?" We learn that a prototype was actually made to test the feasibility of the concept for 72 percent of the inventions.

Particularly revealing were the responses to the question asking the inventors whether "a period allowing for evaluation of the invention or for testing the market would be desirable prior to filing application for patent." There is an even split in the yes/no response, with about half of the respondents giving the reason for their answer, see Table 4. Those who feel a testing period is desirable cite the need for development and appraisal of the invention and the saving of unnecessary expenses. In most instances, 59 percent, those responding that a testing period is undesirable do not give a technical reason; but, rather, give the need to file first and avoidance of prior public knowledge as the reasons for their answers. In other words they file quickly because the law requires it, not necessarily because it is desirable.

TABLE 4
REASONS GIVEN FOR DESIRABILITY OR UNDESIRABILITY OF TESTING PERIOD

Desirability	Number of Inventors
Preliminary protection period too short	1
Would save expenses	7
Delay is necessary to develop and to appraise value of invention	9
No reason given for answer	18
Undesirability	
Market is established	5
Present law is adequate	4
Not needed	3
More prudent to file first	17
No reason given for answer	12
Total usable response	76

Application Pendency Before Publication

The inventors were asked: "What would you consider a desirable period for pendency of an application in your own patent office before publication of the application?" This question was posed to determine the minimum time foreign inventors felt was needed, even after filing, further to develop their invention, and to supplement the original application, before disclosure of their activities. Of the inventors responding to this question, 70 percent think that a period of 18 months would be sufficient, about 24 percent think 18 to 24 months is required, and 94 percent 24 months or less. In this context, it is important to recall from Table 3 that these inventors, though subject in almost all cases to first-to-file systems, in many instances allow a year or longer to elapse between the conception of the invention and the filing of an application. Thus, it appears that the total period of secrecy sought by these inventors is usually not less than two years; and, in approximately 20 percent of the cases, it actually exceeds three years. Since these inventors generally operate or will operate, under systems in which submission to public inspection for opposition before issue is the rule, their judgment on this question is persuasive.[6]

To determine the relationship, if any, between use of the invention and the conception-publication period sought by inventors, we ascertained the degree of relative correspondence between several sets of data. Inventor responses were charted between the time lapse from conception of the invention to the date of actual use, and compared with the time they considered necessary from conception to publication of the patent application. Comparisons were also made between the time from conception to filing and the period inventors reported they required before publication, both for used and for inventions not yet in use at the time of the survey. Additionally, the separate segments (conception to filing and filing to publication) of the period from conception to the date of publication preferred by the inventors were individually plotted against the time lapse from conception to actual use. There appeared to be no relation between use of the invention and the period inventors believed was necessary before publication of the patent application. The responses seemed to reflect, however, a good aggregate judgment as to the time generally needed to develop an invention; the absence of a relationship between use and

[6] See Sections 19, 20, 21, 22 and 23 of the Danish Law, "Nordic Patent Laws," *Industrial Property* (June 1968), pp. 174-175; see Articles 17 and 18 of the French Law, *Industrial Property* (March 1968), p. 68; see Articles 30, 32 and 33 of the German Law, "The Patent Law," *Industrial Property* (May 1968), pp. 141-143.

time desired before publication lends support to the proposition that the responses referred to a period thought necessary, as a general rule, and were significantly influenced by considerations other than the time required to develop the specific invention in our sample. The conclusion which follows reflects this aggregate judgement.

Conclusion

Synthesizing the answers related to filing time, the need for market testing and evaluation of invention, and the initial use of the invention, we would have to conclude that three-fourths of this group of foreign inventors feel a period "for evaluation of the invention or testing the market" is desirable even though it is not currently available. Furthermore, the fact that one-sixth take over two years to file in the U.S., some take just as long to file in their own country, and many seek a period of secrecy before publication suggests that a desirable period for testing and evaluation should not be less than two years; and that exceptions should be made, where circumstances warrant, to protect the unusual invention which requires more time to develop, from an arbitrary cut-off point.

Use of the respondents' patents is less for those filing within six months of the conception date than for those who take longer, both in terms of use within the two years subsequent to filing and use at the time of response to the questionnaire, indicating that early filing may not adequately screen out applications which later prove to be without commercial value.

The experiences of foreign inventors reveals that there would be some "rush to the patent office," if an unmodified first-to-file system were inaugurated in the U.S., and that a system which did not allow a reasonable period for testing and evaluation before filing would likely produce an increase in "precautionary" applications, resulting in wasted time and effort on the part of both inventors and the Patent Office. Because the answers were from inventors residing in countries under first-to-file systems, one might expect a bias in favor of such systems—if only because the inventors are accustomed to operating under them. Accordingly, the indicated need expressed by many respondents for the benefits of a first-to-invent (as opposed to those of a first-to-file) system, must be given serious consideration by those charged with the formulation of U.S. industrial property law and policy.

APPENDIX

LETTER AND QUESTIONNAIRE SENT TO ALL FOREIGN INVENTORS IN A 2 PERCENT SAMPLE OF U.S. PATENTS ISSUED IN 1966

The letter and questionnaire was sent in January 1968 to 431 inventors with 278 inventions. The sample is described in the paper. Each inventor received a separate Part A, with the first 16 lines filled in for each sample patent.

January 5, 1968

Dear ————————:

Your cooperation is solicited on a study of international importance regarding the findings in the recent Report of the President's Commission on the United States Patent System. The enclosed questionnaire, which is being directed to foreign patentees of recently issued United States patents, relates to one of a four part Institute project seeking to illuminate the effect of certain of the major proposals made in the recent report of the President's Commission. This enclosure is based on a statistical sampling of patents issued by the United States Patent Office, and seeks to develop factual information bearing on the experience of creative people in other countries with provisions of the United States law and with provisions in the laws of their countries that are similar to recommendations in the Report of the President's Commission.

In 1965 President Johnson established a Commission to examine the United States Patent System, whose broad objective was to recommend measures to keep the system abreast of current and foreseeable needs of our society. The Commission deliberated for almost two years before presenting its findings to the President. As you may know, they found that patents play a significant role in the country's economic growth. The Commission noted a number of areas where, in their opinion, departures from current practice would be beneficial. Acceptance and enactment of some of these changes would require legislation.

The Patent, Trademark, and Copyright Research Institute is dedicated to an objective analysis of the patent system and its effects on the economy. Accordingly, this report of the Commission generated a special study by the Institute of the potential effects of those recommendations which appear to be substantial departures from current United States practice.

We have tried to keep the questions as simple as possible and to limit them to essential information. In view of the statistical sampling method employed, each response is important to the inquiry. If you are unable to reply to all the questions, please complete those you can (or if you do not write English, respond in the language you prefer), since it is far better to have your partial return than none at all.

We assure you that your reply will be kept in strict confidence and any publication will be in the form of combined data, unless you direct otherwise. The research will be published in *IDEA*, the journal of the Institute.

With best wishes,

Sincerely,

L. James Harris

Questionnaire enclosed

Strictly Confidential

Inventor Questionnaire

Empirical Study of Patents

Part A.

1. Patent Number ..... 2. Serial Number .....
3. Invention .....
4. Inventor (s) .....
5. Residence .....
6. Assignee .....
7. Place and Address .....
8. Date of application ..... (Mo. Day Yr.) 9. Date granted ..... (Mo. Day Yr.)
10. Pending time (months) ..... 11. Claims ..... 12. Class .....
13. Broad classification: M..... E. ..... C. .....

Remarks: .....

All references to a patent are directed to the patented invention specified on the cover sheet, *unless otherwise indicated.*

1. Is this your only patented invention? Yes ☐ No ☐
2. Why did you patent this invention in the U.S.? .....
3. How many patent applications have you pending in your own Patent Office? .....
4. Is your invention patented in countries other than the U.S.? Yes ☐ No ☐ Do not know ☐ If "yes", list countries (or as alternative, indicate groups of countries, i.e. Western Europe, Eastern Europe, Asia, etc.) in which it was patented or a patent application was filed. .....
5. In all, how many patents were issued on this one invention (including the U.S. patent) ? ..... How many of these patents are still in force? .....
6. Are you: (check one) (a) self-employed ☐ (b) a company employee ☐ (c) government employee ☐ (d) retired ☐ (e) other (specify) .....
7. What stimulated or gave rise to your invention? (check one or more) (a) the demands of your job ☐ (b) more income ☐ (c) studies you were engaged in ☐ (d) recognition of the problem ☐ (e) desire for advancement ☐

(f) no known stimulus ☐ (g) accidental ☐ (h) other (specify) .....

.....

8. Was your invention associated with your: (check one or more) (a) work ☐ (b) training ☐ (c) hobbies ☐ (d) other (specify) .....
9. How many months elapsed between the initial conception of your invention and the date when a patent application was actually filed in your own country? ..... In the U.S.? .....
10. If there was a delay in filing, in your own country or in the U.S., what accounted for this delay? .....
11. Was your invention actually made (in the laboratory or otherwise) in order to test its feasibility? Yes ☐ No☐ Other (specify) .....
12. How do you test the commercial value of the invention (if you have not yet filed the patent application in your own country, but propose eventually to do so)? Please explain. .....

.....

13. Do you think that a period allowing for evaluation of the invention or for testing the market would be desirable prior to filing application for patent? Yes ☐ No ☐ Please explain. .....

.....

14. (a) Is your domestic patent (if one has been granted) on the invention assigned? Yes ☐ No ☐ If "yes", was the assignment a part of your contract of employment? Yes ☐ No ☐ By virtue of employee-employer invention law provisions? Yes ☐ No ☐ Was the agreement made *before* ☐ the application for the patent or *after* ☐ ? If after filing, was it *before* ☐ or *after* ☐ the patent was issued? (b) Is your U.S. patent assigned? Yes ☐ No ☐ If "yes", was the assignment a part of your contract of employment? Yes ☐ No ☐
Was the agreement made *before* ☐ the application for the patent or *after* ☐? If after filing, was it *before* ☐ or *after* ☐ the patent was issued?
15. (a) Is your domestic patent licensed? Yes ☐ No☐ Do not know ☐ If "yes", how many licensees does it have? ..... If "no", were efforts made to license it? Yes ☐ No ☐ Do not know☐ If "no", would you now consider licensing it? Yes ☐ No ☐
(b) Is your U.S. patent licensed? Yes ☐ No ☐ Do not know ☐ If "yes", how many licensees does it have? ..... If "no", were efforts made to license it? Yes ☐ No ☐ Do not know ☐ If "no", would you now consider licensing it? Yes ☐ No ☐
16. (a) Is your domestic patent used* in production now? Yes ☐ No ☐ Other (specify) .....
(b) Is your U.S. patent used* in production now? Yes ☐ No ☐ Other (specify) .....
17. (a) If your domestic patent is not used in production now, has it ever been used in production? Yes ☐ No ☐ Other (specify) .....

---

* Please answer regardless of the extent of use. A patent is considered used commercially if it is sold to a company, is produced for sale, is used in the production of some other item, or royalties are received under a license. In other words, this includes the making, using, or selling of the patented product or the utilization of the patented process for which the maker, user, or seller would be liable for infringement under the claims of the patent had he not been the patentee, the assignee, or the licensee of the patent.

(b) If your U.S. patent is not used in production now, has it ever been used in production? Yes ☐ No ☐ Other (specify) _____

18. (A) If your domestic patent has never been used in production, are there indications that it will be used in the foreseeable future? (a) definite indication it will be used ☐ (b) some indication it might be used ☐ (c) no indication it will be used ☐ (d) other (specify) _____
(B) If your U.S. patent has never been used in production, are there indications that it will be used in the foreseeable future? (a) definite indication it will be used ☐ (b) some indication it might be used ☐ (c) no indication it will be used ☐ (d) other (specify) _____

19. (a) If your domestic invention is or was ever used in production, what is the date when it was first used?* _____ (month) (year) (b) If your U.S. invention is or was ever used in production, what is the date when it was first used?* _____ (month) (year)

20. (a) If the domestic invention was in use, but is no longer in use, what is the date when it was last used?* _____ (month) (year) (b) If the U.S. invention was in use, but is no longer in use, what is the date when it was last used?* _____ (month) (year)

21. (A) If your domestic invention is not being used* in production at this time, or it is being used only slightly, is it because of: (check one or more) (a) lack of market demand ☐ (b) rapid obsolescence ☐ (c) competition from U.S. firms ☐ (d) competition from non-U.S. firms ☐ (e) shortage or lack of venture capital ☐ (f) development of the art has taken a different course ☐ (g) supporting arts have not developed sufficiently ☐ (h) neglect to exploit it ☐ (i) patent does not provide sufficient protection ☐ (j) do not know the reason ☐ (k) other (specify) _____
(B) If your U.S. invention is not being used* in production at this time, or it is being used only slightly, is it because of: (check one or more) (a) Lack of market demand ☐ (b) rapid obsolescence ☐ (c) competition from U.S. firms ☐ (d) competition from non-U.S. firms ☐ (e) shortage or lack of venture capital ☐ (f) development of the art has taken a different course ☐ (g) supporting arts have not developed sufficiently ☐ (h) neglect to exploit it ☐ (i) patent does not provide sufficient protection ☐ (j) do not know the reason ☐ (k) other (specify) _____

22. (a) If your domestic patent is being used commercially or has been used: If it is a product, how many months after filing the patent application did you (or your assignee) make the first sale? _____ If it is a process, how many months after filing the patent application was the process put in actual operation? _____ (If sale of the product or use of process occurred before patent application, please indicate this.) _____
(b) If your U.S. patent is being used commercially or has been used: If it is a product, how many months after filing the patent application did you (or your assignee) make the first sale? _____ If it is a process, how many months after filing the patent application was the process put in actual operation? _____ (If sale of the product or use of process occurred before patent application, please indicate this.) _____

---

*See explanation above.

23. What would you consider a desirable period for pendency of an application in your own Patent Office before publication of the application? _____
In the U.S. Patent Office? _____

We will welcome any additional views you may wish to offer. _____

Observations on the Presidential Commission's Recommendations for Recasting the U.S. Patent Laws

BARKEV S. SANDERS*

IN ANY DELIBERATE APPRAISAL of the work of the Presidential Commission and its Report "To Promote the Progress of . . . Useful Arts in an Age of Exploding Technology" (Washington, D.C.: 1966) it would seem sufficient to call attention to the fact that these recommendations had little if any objective criteria to lead one to believe that their enactment would maximize the benefits that this nation may derive from the inventiveness of its citizens and others abroad who are interested to patent their inventions in the United States. Judging from the Report of the Commission, there is little indication to the author that it undertook any first-hand studies to determine how the present patent system is working, let alone any efforts to appraise empirically the operating potential of the substitute system which it recommended for adoption.

With a different composition of the Commission, in all probability a different set of recommendations for changes would have been made.

* Dr. Sanders is a Principal Investigator, The PTC Research Institue.

That this might have been the case is attested to by the wide range of different views on nearly all the matters with which the Commission concerned itself among people knowledgeable (as much as knowledge is available) and interested in the best possible working of our patent system. As Project Leader John Green has indicated,[1] these questionnaires, supplemented by a small number of face-to-face interviews, probed the views of: (1) Outstanding inventors as compiled by the Patent Office; (2) a statistically selected sample of inventors who were issued U.S. patents in 1966 and who responded to the Research Institute's questionnaires regarding sampled patents; (3) assignees of patents, officers of various corporations with significant number of patents; (4) licensees of patents; (5) patent attorneys; (6) research administrators of large corporations engaged in research; (7) corporate executives who finance R&D activities; (8) production engineers; (9) foreign or international patent experts; (10) foreign inventors who received a United States patent in 1966; (11) governmental agencies dealing with patents; and (12) universities with known patent activity. The outcome of these reactions to the more important recommendations of the Commission is related in some detail throughout this volume and it fails to support the more important recommendations of the Commission.

In changing our patent laws, if we are content to place our confidence in the views of a large segment of knowledgeable and interested publics, such a majority appears to fail to support most of the important changes recommended by the Commission. It would seem to this observer that in wider and wider areas of public policy we find that decisions, even when based on the consensus of those deemed knowledgeable and interested, may not lead us to adopt the best course to be pursued in a given public program. In the opinion of this writer, what is needed is patient painstaking studies to be able to understand the workings of a system that we desire to alter before we can hope to make changes in that system that would be for the better, especially in the long run. In an era in which change for change's sake is becoming a fetish, it is all the more important for those genuinely interested in an effective patent system to see that we hold on to what we have while we study and appraise its merits and shortcomings in comparison to the merits and shortcomings of alternatives that have been considered or may be considered. Without this deliberate approach to change, a radical interference with the "innards" of the

[1] Green, John, "Patent Outlook," *IDEA,* Volume 12, Conference Number 1968, pp. 48-54; 86-87.

patent system could be much more of a threat to our economy than continuing with the laws which have at least demonstrated their workability. As against this deliberate approach to change, the Commission resorted to no empirical studies known to this writer, no comparative analysis, it merely relied on stirring emotions for change as the primary justification for its recommendations. Its opening paragraph observes:

> Although the laws have been amended on numerous occasions—and even rewritten twice since 1836—no basic changes have been made in its general character in the succeeding one hundred and thirty years.[2]

The Report lacks documentation which presumably was to follow, judging from this statement in the Preface:

> Background material prepared by the staff and the Commission, reflecting more extensively the considerations taken into account in the development of these recommendations, is being completed and will be transmitted as a supplement to this report.[3]

From the very beginning this observer has been interested in seeing the nature and content of this background material supporting the Commission's recommendations but has not seen anything in a published form. He is therefore led to believe that despite the assertion of the Commission, since no background material has been published, that such material could not have been very supportive of the specific recommendations.

Surely a consensus type of decision by those knowledgeable and interested should be preferred over the Commission type of approach. The Research Institute's studies provide a basis for that, from that standpoint a forthcoming summary volume should prove instructive, supplemented by the Conference volumes for 1967 and 1968.[4]

If, on the other hand, consideration is to be given to the point of view of this observer, consensus as such, though necessary and desirable, per se is not an adequate basis for reconstituting existing patent laws. The only sound course is to be based on a thorough understanding of the workings of the patent laws in this country and abroad and an objective appraisal of all substitute proposals such as those recom-

---

[2] *To Promote the Progress of . . . Useful Arts in an Age of Exploding Technology. Report of the President's Commission on the Patent System* (Washington, D.C.: G.P.O. 1966), p. 1.

[3] *Supra* note 2, p. ii.

[4] "Will Proposed Legislation Deriving from the Report of the President's Commission Meet the Challenger?" *IDEA* Vol. 11, Conference No. 1967, pp. 63-195; also see *IDEA*, Volume 12, Conference Number 1968.

mended by the Commission. If this becomes an acceptable alternative, then it would be rather pointless to insist that any work started under the impetus of the Commission's recommendations would have to be concluded when the aforementioned forthcoming volume is completed by the Research Institute. In fact, it becomes pointless to set any kind of arbitrary time limits on empirical inquiries as long as new insights are being gained, or new relationships are being established from continuing inquiries and exploration. It was in this spirit that this investigator began his inquiry based on a 2 percent sample of patented inventions of the United States issued in 1966 to inventors and assignees. While some of the information sought in this ongoing inquiry has direct bearing on some of the recommendations made by the Commission, others have little if any direct relationship.

The Institute has sought to ascertain the effect of the proposed changes on inventors and assignees and, more important, on the quality and quantity of inventions and innovations that would flow from the changed system that is being proposed. For some of the Commission's recommendations as to the probable consequences that would follow if these were enacted into law they may be inferred with greater reliability from studies such as were carried out in the Patent Utilization Study and in the current study which hopefully could be extended toward developing an index for measuring objectively and continuously the quality changes in patented inventions in the United States rather than by hypothetical questions to inventors and assignees.

It is perhaps significant that the first alleged objective to be achieved by the recommendations made by the Commission is: "1. To raise the *quality* and reliability of the U.S. Patent."[5] (emphasis added).

It is uncertain just what the Commission had in mind with respect to "quality" of United States patents. At present we have no index of quality of patented inventions in this country or anywhere else. Though in the opinion of this observer such an index is a necessity in order for us to be able to judge objectively how to appraise the effect of this or that modification of the patent procedures on the inventive output, and how to compare the economic merits of patented inventions from different sources. To achieve these ends with the limited resources that the Research Institute can assign to this type of long-range inquiry may mean years before worthwhile results along these lines can be expected with any assurance. At this stage only a minimal amount of the available information has been extracted from

[5] *Supra* note 2, p. 3.

the completed questionnaires on questions which have a direct bearing on some of the important recommendations made by the Commission.

RECOMMENDATIONS I AND II:

These Recommendations are designed to fulfill the objectives 2 and 3, i.e.:

> 2. To shorten the period of pendency of a patent application from filing to final disposition by the Patent Office, and
> 3. To accelerate the public disclosure of technological advances.[6]

Is it not possible that in some measure, perhaps in a large measure, the lengthening time between the filing date and the date of issue, which has been observed in recent decades may be the natural consequence of the growing complexity of the arts? Various inquiries by the Patent Office have demonstrated progressive increase in the length of the average patent application (in terms of the number of printed pages), in terms of Examiner hours in searching for prior art, and in Examiner time required per determination. Should one not stop to consider whether there has been and there is continuing to be a progressive change in the nature and content of patented inventions, which change may primarily account for the increasing pending time, and any administrative measures to accelerate this process might prove futile, or worse still, may be damaging to inventions and innovations. In medicine we have advanced far enough to know that some remedies have side effects that make the cure worse than the disease. This may be even more true when we are dealing with a system of higher order of complexity than the physiology of man.

The Commission presents no evidence that at present inventors or patentees are slow in filing for patents and vigorously prosecuting their claim for getting a patent, yet it provides a cure for a malady that may not be there at all; except for antipatent allegations by authors such as Vaughan[7] that large corporations bottle up inventions so as not to obsolete their current capital equipment for which I have found no objective evidence. The evidence which this observer has gained from his studies gives no indication that there is any significant delay in exploiting inventions by patentees themselves.

For instance, in a study of pending time in the Patent Office for

---

[6] *Ibid.*

[7] Vaughan, Floyd L., *The United States Patent System* (Norman: University of Oklahoma Press, 1956). The last chapter is especially noted.

assigned patents (based on the Patent Utilization Study) this writer found no significant difference in the duration between patented inventions that had been put to commercial use, before filing, after filing, and after issue, nor between these and patented inventions which had never been used commercially. Thus the mean duration of pending time for commercially used inventions was 41.9 months in comparison with 42.2 months for inventions which had not come into use. The mean pending time for inventions used commercially before an application was filed was 40.8 months as contrasted with 44.3 months for inventions that were put to commercial use after patent application, but before the patent was granted—and finally 35.9 months for the handful of inventions in which commercial use began after the patent had been issued.[8] These relationships give no clue of intentional delays on the part of inventors and assignees—yet the measures adopted by the Commission seem directed to this end. The present writer is inclined to believe that the competitive drive of the marketplace appears to be the whip that drives inventors and assignee corporations to exploit their inventions as quickly as possible. Long before the Commission's appointment this observer was so impressed by this evidence that he labeled his analysis of this phenomenon "Speedy Entry of Patented Inventions Into Commercial Use."[9]

This analysis, based on a sample of patents issued in 1938, 1948, and 1952, found that for a large proportion of inventions which are put to commercial use, such use precedes the patent application, indicating that effective exploitation of useful inventions often predates the filing of a patent application. The recommendations of the Commission with respect to this objective of expediting action are:

(1) Patent is granted to the first to file.
(2) Present grace period would no longer exist.

And they seem incompatible with these findings which give no clue to inaction on the part of inventors or assignees.

Furthermore, the Commission presumes that its recommendations if enacted into law will reduce and expedite the work of the Patent Office. This is especially the thrust of Recommendation II, substituting the filing of a preliminary application for the present grace period. In doing this, the Commission fails to appreciate the probability that if this Recommendation is carried out it will inundate the

[8] Sanders, B. S., "Speedy Entry of Patented Inventions Into Commercial Use," *PTC J. Res. & Ed. (IDEA)*, Vol. 6, No. 1 (Spring 1962), pp. 87-116, at p. 107, Table 8.

[9] *Supra* note 8, p. 87-116.

Patent Office with all sorts of ill-conceived ideas, very few of which will have the potential of developing into worthwhile, bona-fide, economically useful, patented inventions. This conclusion is inferred from replies of assignees in the Patent Utilization Study showing that for nearly 40 percent of the patented inventions that are put to commercial use, such use commenced before a patent application was filed. These findings have been more than vindicated by the latest study based on a sample of inventors and assignees who were issued a United States Patent in 1966.

Table 1 shows the replies of assignees with respect to the date when commercial utilization of the patented invention to which the query was directed began (in relation to the date when the patent application was filed and the date on which the patent was granted).[10]

It is seen that for nearly 40 percent of the patented inventions commercial use began before a patent application was filed. Only for 12 percent, commercial use of the inventions of assigned patents was reported to have commenced after the issuance of the patent. This reflects active pressure to commence the commercial utilization of the invention as soon as possible. There is no evidence that corporations sleep on their patent rights. This would suggest that patented inventions which are not put to commercial use as soon as possible are apt to be made obsolete by more advanced inventions. Corporations have learned that if an invention which is patented is commercially useful, but for any reason is not put to commercial use, the competition is almost certain to come up with alternative approaches or develop some "passing" substitute. This may not be as good as the "shelving" corporation's, but good enough to obsolete the investment which the "shelving" corporation was hoping to salvage. The only way that corporations can retain their lead would be through putting into use their own inventions without delay and to continue improving on these. And this seems to be what is actually taking place. Rapid obsolescence (one of the major causes of current non-use of patents) may be one of the propulsive forces responsible for this speed in putting inventions to work. If true, the added pressure that would be

---

[10] These patents in which specific information was sought were part of a systematically selected sample of patents issued in 1938, 1948 and 1952 by the United States Patent Office. See: Rossman, J., Sanders, B. S., "Patent Utilization Study," *PTC J. Res. & Ed. (IDEA)*, Vol. 1, No. 1 (June 1957), pp. 74-111. Sanders, B. S. *et al.*, "Patent Utilization," *PTC J. Res. & Ed. (IDEA)*, Volume 1, Conference Number 1957, pp. 67-83, 150-155. Sanders, B. S., "Speedy Entry of Patented Inventions Into Commercial Use," *PTC J. Res. & Ed. (IDEA)*, Vol. 6, No. 1 (Spring 1962), pp. 87-116.

TABLE 1

NUMBER AND PERCENTAGE DISTRIBUTION OF ASSIGNED U. S. PATENTS REPORTED IN COMMERCIAL USE FOR WHICH THE DATE WHEN USE BEGAN WAS REPORTED—IN RELATION TO THE DATE WHEN PATENT APPLICATION WAS MADE AND THE DATE ON WHICH THE PATENT WAS ISSUED—FOR EACH YEAR AND FOR THE THREE YEARS COMBINED.*

Time when use began	Year of Issue							
	Combined		1938		1948		1952	
	No.	%	No.	%	No.	%	No.	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total	245	100.0	76	100.0	60	100.0	109	100.0
Before filing patent application	96	39.2	27	35.5	25	41.7	44	40.4
After application but before issue	120	49.0	38	50.0	29	48.3	53	48.6
After issue	29	11.8	11	14.5	6	10.0	12	11.0

* Source: Assignee questionnaires with adequate and pertinent replies. Patent Utilization Study

generated by the Commission's recommendations might prove harmful rather than helpful in promoting useful inventions and innovations.[11]

Question may arise that perhaps this pressure is felt only by assignees and not inventors, especially the independent inventors who still account for nearly 25 percent of our patents. In our current inquiry we sought the date on which the patented invention was put to commercial use both for assigned and unassigned patents addressing ourselves both to inventors and assignees. The question was:

> If the sampled invention is or was ever used in production, what is the date when it was first used? (month and year of such initial use).

The replies related to the date on which a patent application was filed are shown in Tables 2 to 4 inclusive.

Table 2 is based on assignee replies and therefore in a way is comparable to the percentages given in Table 1. It is to be seen that on this basis at least 52 percent of the assigned patented inventions for which the date when use began was reported, that this date preceded the date on which application for a patent was filed. For an additional 5 percent, both events occurred within the same month, which would lead one to infer that in about half of these, the actual date of use preceded the date of filing. Therefore, according to assignees in about 55 percent of the patented inventions that were put to commercial use, for which the date when such use began was reported, the date on which the use began predated the application for a patent. This would suggest increased pressure for early exploitation of patented inventions compared with the period of late 1930 to early 1950. More detailed analysis and subsequent questionnaires may reduce this percentage somewhat, to the extent that these questionnaires were answered on the average about one year after issue, and it is plausible that a few more patented inventions issued in 1966 may be put to commercial use more than one year after their issuance. In the 1938-52 sample of the 32 (estimated) assigned patented inventions put to commercial use after issue, for 18 the use began within the first year

[11] This inference is strengthened by the fact that in response to the question, "If your sampled patent is not being used in production at this time, or it is being used only slightly, is it because of . . ."; the predominant reason given by inventors of assigned patents was "rapid obsolescence." Rapid obsolescence was also given as one of the three most frequent reasons by assignees for all patents. For patents that had been used at one time "rapid obsolescence" was mentioned by far most frequently as the cause for current non-use. Even inventors of unassigned patents mentioned rapid obsolescence with some frequency as the reason for current non-use of the sampled patents. See Sanders, B. S., Rossman, J., and Harris, L. J., "The Non-Use of Patented Invention," *PTC J. Res. & Ed. (IDEA)*, Vol. 2, No. 1 (March 1958), pp. 1-60.

TABLE 2

PATENTED INVENTIONS ISSUED IN 1966 THAT WERE PUT TO COMMERCIAL USE RELATING THE MONTH IN WHICH USE BEGAN TO THE DATE OF PATENT APPLICATION. (BASED ON ASSIGNEE REPLIES.)

Time of Use to Time of Filing	All Patented Inventions Put to Use		In Current Use		In Past Use	
	No.	%	No.	%	No.	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Before Filing	61	52.1	48	48.5	13	72.2
Within Same Month	6	5.1	5	5.1	1	5.6
After Filing	50	42.7	46	46.5	4	22.2
Unknown	25	—	18	—	7	—
Total (Known)	117	100.0	99	100.0	18	100.0
Aggregate Total	142	—	117	—	25	—

after issue and for only 11 (3 estimated) the use began two or more years after the issuance of the sampled patent.[12]

Examining Table 2 more closely shows that patented inventions no longer in use have a much higher proportion that were put to use prior to filing, tending to confirm our hunch that an important motive force toward earliest possible exploitation may be the fear of rapid obsolescence, as we have already suggested. It is quite possible that in these obsolescence cases the assignee could sense the hot breath of competition on its neck and therefore put the invention to commercial use as soon as he could, taking his chances with the law.

Table 3 is based on the replies of inventors of assigned patented inventions. In questions of this nature, we consider the replies from assignees more objective and reliable than those from inventors themselves.

As far as the proportion of patented inventions predating the date of filing for patent application is concerned, Table 3 closely resembles Table 2. This corroborates the finding that more than half of the patented inventions reported in commercial use, for which the date when use began was reported, preceded the date on which the patent application was made. The overall percentage, taking into consideration the 6.4, for which use began in the same month in which the

[12] *Supra* note 8, at 96, Table 5.

TABLE 3

ASSIGNED PATENTED INVENTIONS ISSUED IN 1966 THAT WERE PUT TO COMMERCIAL USE RELATING THE MONTH IN WHICH USE BEGAN TO THE DATE OF THE PATENT APPLICATION. (BASED ON INVENTOR REPLIES.)

Time of Use to Time of Filing	All Patented Inventions Put to Use		In Current Use		In Past Use	
	No.	%	No.	%	No.	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Before Filing	156	52.3	123	51.0	33	57.9
Within Same Month	19	6.4	17	7.1	2	3.5
After Filing	123	41.3	101	41.9	22	38.6
Unknown	33	—	22	—	11	—
Total (Known)	298	100.0	241	100.0	57	100.0
Aggregate Total	331	—	263	—	68	—

application was filed, indicates that for 55 to 56 percent of these patented inventions the commercial use of the invention preceded the date of filing for a patent according to the inventor.

The differential in the date of commercial use prior to filing between patented inventions still in use and those no longer in use is much less in Table 3 as compared with Table 2. This writer, nevertheless, would place more confidence in the data concerning commercial use information supplied by the assignee compared with such information supplied by the individual inventor. The discrepancy may, on the other hand, underscore the need for further probing of information of this type and its possible significance for us.

Table 4 supplied similar information for patented inventions that were not assigned. Such information for unassigned patents can be provided only by the inventor.

It should be appreciated, of course, that in our sample of inventors residing in the United States, unassigned inventions (exclusive of those known to have been assigned after issue) amounted to 21 percent. As in the patent utilization studies the response rate is considerably lower for inventors of unassigned patents as compared with inventors of assigned patents. Of the 267 questionnaires mailed to these inventors to date, only 101 have been returned. Of these, only 43 reported the sampled patent to have been put to commercial use.

TABLE 4

UNASSIGNED PATENTED INVENTIONS PUT TO COMMERCIAL USE RELATING THE MONTH IN WHICH USE BEGAN TO THE DATE OF PATENT APPLICATION.

Time of Use to Time of Filing	All Patented Inventions Put to Use		In Current Use		In Past Use
	No.	%	No.	%	No.
(1)	(2)	(3)	(4)	(5)	(6)
Before Filing	16	45.7	14	48.3	2
Within Same Month	1	2.9	1	3.4	0
After Filing	18	51.4	14	48.3	4
Unknown	8	—	6	—	2
Total (Known)	35	100.0	29	100.0	6
Aggregate Total	43	—	35	—	8

These are the ones shown in Table 4. For only 35 the date when use began is given. The indication, based on this limited sample of unassigned patents, is that for between 40 and 50 percent of those that are put to commercial use, such use precedes the date on which the patent application is filed.

If these findings are valid and can be substantiated, they constitute strong evidence against the implementation of the Commission's Recommendations I and II.

ABOLITION OF GRACE PERIOD

The evidence supplied in Tables 1 through 4 leads this observer to believe that the present grace period plays a very significant role in reducing the work of the Patent Office. Thousands of inventions are never brought to the Patent Office because of the grace period. They are first tried in the marketplace and, if for any reason they fail the market test, no patent application is filed. It is believed that this phenomenon may in large part account for the apparent anomaly pointed out by the late Frank A. Howard in his Kettering Award acceptance speech in 1960. Said Mr. Howard:[13]

[13] Howard, Frank A., "Patents and Technical Progress," *PTC J. Res. & Ed. (IDEA)*, Volume 4, Conference Number 1960, pp. 57-66.

> It would be customary at this point to pay tribute to American invention and to the patent system which we are all sure fosters it, but instead I propose to call attention to some perplexing figures on the relation of patents to technical progress.
> The first thing we must face up to, I believe, is to our own country, which we have long regarded as the leader in technical progress, as shown by our efficient industries and our high standard of living, is far from being a leader in per capita output of inventions. The Swiss produce per capita more than three times the number of patent applications which we produce; the Swedes more than twice as many, and both the Germans and the English outrank us. In fact, our per capita output of creative technical ideas seems to be nearer the bottom than the top of the list of mature industrial countries.[14]

Then Mr. Howard calls attention to a decline in per capita patenting:

> In 1930 we issued 45,000 patents. The number issued each year declined into and through the war years, dropping to a low of just over 20,000 in 1947. The post-war climb brought us in 1958 to 48,400. [This number in 1967 was 7 percent over the 1930 figures.] But during this same period of 30 years our population grew about 45 percent, so that the per capita output of United States patents over this period seems to have declined by about 38 percent.[15]

Considering trends in inventiveness in this country and abroad, Mr. Howard concludes:

> I am afraid that we must, therefore, accept the fact that our per capita output of inventions is not only low in the list of industrial countries, but also that it has declined much more over the last 30 years than that of other leading industrial nations.[16]

These apparent anomalies that puzzled the late Frank A. Howard could in large measure be accounted for if we accept our findings at face value that in the United States (because of our grace period) many inventions are first tried in the marketplace and abandoned if they fail. Of those tried in the market, only the successful ones are patented if their continuing usefulness is expected. This tendency to try in the market is particularly true with respect to assigned inventions, though it is by no means confined to these; and this tendency to try inventions in the market before considering patenting them has become more and more prevalent over the years. If these could be

---

[14] *Ibid.*, p. 58.

[15] *Ibid.* Also this observer long ago called attention to the declining number of per capita patent applications in this country. Sanders, B. S., "The Course of Inventions," 51 *JPOS*, 571-591 (1936). Also "Some Difficulties in Measuring Inventive Activity" by the same author in *The Rate and Direction of Inventive Activity, Economic and Social Factors*, a Report of the National Bureau of Economic Research, pp. 53-77.

[16] *Supra* note 13, p. 60.

established, it would follow that the abolition of the grace period, and the substitution of granting the patent to the one who files first, instead of to the true inventor, among other things would double or treble the number of patent applications. Thus, it would appear if the Commission's recommendations were incorporated in the patent laws, the consequences most likely to flow from their incorporation would be exactly opposite of the stated objectives claimed for them by the Commission. The consequences of such an increase in application rates is apt to mean greater delays in the Patent Office for pending applications, higher costs in obtaining a patent, many more litigations and by and large a lowered quality of patents issued—all converse to the alleged benefits that, according to the Commission, would result from the adoption of its recommendations.

It is believed further that the present provision of a grace period combined with the principle of issuing the patent to the true inventor, regardless of whether he is the first to file, operates to reduce applications since the inventor has time to consider more objectively what use he might make of the invention. He often abandons the initial impulse to patent when he sees little economic prospect from it as he examines these prospects more deliberately. It is believed this accounts in some measure for the fact that most American patentees indicate one or more inventions which for varying reasons were never submitted to the Patent Office. The "first-to-file" requirement would add these, as well, to the patent applications, thus helping to increase the volume and lower the quality of economically productive inventions filed for and patented. These statistics are reflected in Tables 5 and 6.

Table 5 indicates that about two-thirds of all inventors with one or more patented inventions had one or more additional inventions for which no patent application was filed. Table 6 indicates the reasons given for failing to file an application—it should be noted that at least two of the reasons given are not compatible with our definition of patentable inventions.

IMPLICATIONS OF GRANTING THE PATENT TO THE ONE WHO FILES FIRST

Even if it were true that the requirement to grant the patent to the first one who files will not cause injustice to anyone—though there is no objective study to document this assertion—its implementation would increase enormously the number of applications filed, this

TABLE 5

FREQUENCY AND PERCENTAGE OF RESPONSE BY INVENTORS OF ASSIGNED AND UNASSIGNED PATENTS IN THE PATENT UTILIZATION STUDY AS TO WHETHER THE INVENTOR HAS HAD PATENTABLE INVENTIONS WHICH HAD NOT BEEN PATENTED—FOR EACH YEAR AND FOR THE THREE YEARS COMBINED.*

Inventor Reply (whether he had patentable inventions that were not patented)	Inventors of assigned patents								Inventors of unassigned patents							
	Combined		1938		1948		1952		Combined		1938		1948		1952	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Yes	449	65.1	108	67.1	102	58.9	239	67.1	131	64.8	23	74.2	34	69.4	74	60.7
No	188	27.2	37	23.0	56	32.4	95	26.7	62	30.7	6	19.4	15	30.6	41	33.6
Not answered	53	7.7	16	9.9	15	8.7	22	6.2	9	4.5	2	6.4	0	0.0	7	5.7
Total	690	100.0	161	100.0	173	100.0	356	100.0	202	100.0	31	100.0	49	100.0	122	100.0

Source: Response to Question 19 of Inventor Questionnaire, Patent Utilization Study.

* "Yes" may mean not one but any number of inventions on which for one reason or other no patent application was filed.

TABLE 6

FREQUENCY AND PERCENTAGE OF INVENTORS GIVING REASONS AS TO WHY ONE OR MORE OF THEIR PATENTABLE INVENTIONS WERE NOT FILED FOR BY EACH YEAR AND FOR THE THREE YEARS COMBINED.

	Inventors of assigned patents								Inventors of unassigned patents							
	Combined		1938		1948		1952		Combined		1938		1948		1952	
Reasons	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
Not economically feasible	116	24.6	34	29.1	23	20.9	59	24.1	17	13.1	7	30.4	3	9.7	7	9.2
Doubtful useful value	86	18.2	20	17.1	22	20.0	44	18.0	22	16.9	3	13.0	11	35.5	8	10.5
Lack of capital	58	12.3	12	10.3	14	12.7	32	13.1	49	37.7	5	21.7	10	32.3	34	44.7
Company policy	41	8.7	9	7.7	10	9.1	22	9.0	0	0.0	0	0.0	0	0.0	0	0.0
Kept secret	35	7.4	7	6.0	11	10.0	17	6.9	0	0.0	0	0.0	0	0.0	0	0.0
Too busy—no time	29	6.1	4	3.4	10	9.1	15	6.1	5	3.8	1	4.3	2	6.5	2	2.6
Already patented*	23	4.9	10	8.5	5	4.5	8	3.3	5	3.8	0	0.0	0	0.0	5	6.6
Not completed	11	2.3	2	1.7	0	0.0	9	3.7	5	3.8	0	0.0	0	0.0	5	6.6
Too much "red tape"	12	2.5	4	3.4	1	0.9	7	2.9	2	1.5	0	0.0	0	0.0	2	2.6
Did not realize importance	13	2.8	0	0.0	4	3.6	9	3.7	0	0.0	0	0.0	0	0.0	0	0.0
Idea stolen	5	1.1	3	2.6	0	0.0	2	0.8	4	3.1	0	0.0	1	3.2	3	3.9
Application rejected*	4	0.8	0	0.0	2	1.8	2	0.8	3	2.3	1	4.3	0	0.0	2	2.6
Legal time lapse	3	0.6	3	2.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Traded information	1	0.2	0	0.0	0	0.0	1	0.4	1	0.8	1	4.3	0	0.0	0	0.0
Other reasons	8	1.7	1	0.8	2	1.8	5	2.0	7	5.4	2	8.7	0	0.0	5	6.6
No reason given	27	5.7	8	6.8	6	5.5	13	5.3	10	7.7	3	13.0	4	12.9	3	3.9
Total	472	100.0	117	100.0	110	100.0	245	100.0	130	100.0	23	100.0	31	100.0	76	100.0

Source: Response to Question 19 of Inventor Questionnaire for the Patent Utilization Study.
* If true, these inventions do not belong in this universe.

increase would drastically lower the quality of these inventions and perhaps greatly increase litigation and conflicts. Such a recommendation should not be adopted before a careful appraisal of its effects in other systems which use this practice.[17] Our studies would suggest that in many instances months elapse after the conception of the invention before the inventor can clearly indicate the nature and the specific novelty of his invention. In the Patent Utilization Study we asked both inventors and assignees the following questions:

> Inventor questionnaire, Question 13: "How many months elapsed between the initial conception of the idea of your sample invention and your development of it to a stage ready to apply for a patent?"[18]

A similar question was asked of the assignee (Question 5 in the assignee questionnaire).[19]

The replies are shown in Table 7, based on assignee and inventor returns for assigned patents and the inventor returns for the unassigned patents.

It will be seen that on the basis of assignee replies the time required for one-half of the patents to be far enough developed to apply for a patent is in excess of eight months. For patents of unassigned inventions, 50 percent of the inventions require more than 11 months. These findings raise questions of how meaningful would be the invention when first conceived and how specific? The time lapse shown in Table 7 raises questions also with respect to the Commission's Recommendation VII:

> Publication of a pending application shall occur eighteen to twenty-four months after its earliest effective filing date, or promptly after allowance or appeal, whichever comes first.[20]

It is seen that 20 percent of patented inventions on the basis of assignee replies require more than 18 months for the inventor to have progressed far enough for patenting. Presumably these inventions could not be ready for publication, since 10 percent of the inventions according to the assignee require more than 27 months from the date

---

[17] All countries except the United States, Canada, and the Philippine Islands, grant the patent to the one who files first. Therefore, it should not be too difficult to undertake some carefully designed studies to ascertain the strength and weaknesses of this practice and its effect on the quality and quantity of patented inventions if it were to be adopted in this country.

[18] *Supra* note 5. See Rossman, J., Sanders, B., "The Patent Utilization Study," *PTC J. Res. & Ed. (IDEA)*, Vol. 1, No. 1 (June 1957), p. 105.

[19] *Supra* note 18, p. 109.

[20] *Supra* note 2, p. 18.

TABLE 7

DISTRIBUTION IN DECILES AND QUARTILES OF MONTHS LAPSED FROM THE CONCEPTION OF THE IDEA TO THE TIME WHEN INVENTION WAS FAR ENOUGH ADVANCED SO THAT A PATENT APPLICATION COULD BE FILED ON IT.[a b c]

Deciles and Quartiles (Percent)	Assignee replies		Inventor replies			
			Assigned patents		Unassigned patents	
	Cumulative number of replies	Estimated time lapse (months)	Cumulative number of replies	Estimated time lapse (months)	Cumulative number of replies	Estimated time lapse (months)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
10	47	1.44 or less	58	0.69 or less	19	0.98 or less
20	93	2.86 " "	115	1.56 " "	37	2.49 " "
25	116	4.52 " "	144	2.07 " "	47	3.56 " "
30	140	5.22 " "	173	2.55 " "	56	5.08 " "
40	186	5.81 " "	230	3.93 " "	75	5.83 " "
50	233	8.02 " "	287	5.43 " "	94	11.01 " "
60	280	11.15 " "	346	6.00 " "	112	11.46 " "
70	327	14.00 " "	404	11.02 " "	131	11.92 " "
75	350	16.53 " "	433	11.40 " "	140	17.06 " "
80	373	17.98 " "	462	11.78 " "	150	23.28 " "
90	420	27.00 " "	519	17.98 " "	168	47.33 " "
100	466	96.00 " "	577	120.00 " "	187	360.00 " "

[a] Based on replies of assignees and inventors for assigned and unassigned patents.

[b] Presumably these time lapses reported are for the inventive act and make no provision whatsoever for any additional time lapse required for searching and for any preparation required in filing the patent application.

[c] The study was in terms of an original 2 percent of patents issued to residents of the United States in 1938, 1948 and 1952.

of conception before the invention is deemed ready for patenting. These time requirements are even longer for inventors of unassigned patents. For the unassigned patents, 20 percent reported more than 23 months required from the date of conception to develop the invention to a stage which is deemed far enough advanced to file a patent application—10 percent require more than 47 months. Again, if these replies are meaningful, serious question arises regarding the consequences of some of the Commission's recommendations.

In our recent study we again pursued this matter both in the inventor and assignee questionnaires. The questions asked bearing on this matter in the assignee questionnaire read:

> 5. (a) How many months elapsed between the initial conception of the idea of the sampled invention and the development of it to a stage ready to apply for a patent?
> (b) What circumstances determined the readiness to apply?
> 6. How many months elapsed between the initial conception of your sample invention and the date when patent application was filed?

For the inventor questionnaire, the wording was slightly different—though the purpose was the same:

> 15. How many months elapsed between the initial conception of the idea of your sampled invention and your development of it to a stage ready to apply for a patent?
> 16. How many months elapsed between the initial conception of your sampled invention and the date when patent application was filed?
> 17. If there was a delay in filing, what accounted for this delay?

This deviation from the earlier wording was used to separate any time requirement incidental to filing as such, so as not to color the duration required to develop the invention to a stage where in the opinion of the inventor and/or the assignee a patent application could be filed for it.

On the basis of inventor replies for assigned patents, for only 16 percent, presumably a patent application was filed as soon as the invention was advanced to a stage of development at which it could be patented—in other words, there was no additional time required for filing the application as such. In 84 percent, additional time was required for filing the application. The reported time for the first group was somewhat longer than for the second, but this relationship was reversed markedly when additional time required to file the patent application was taken into consideration for this second group.

For unassigned patents about 23 percent reported no extra time

lapse for filing the patent. The lapsed time reported by this group, from conception to the stage when it was deemed ready for patenting, was also somewhat shorter than for the group reporting additional time required for filing.

Time has not permitted the tabulation of assignee replies with respect to time lapse requirements for developing the invention, but the inventor replies for assigned and unassigned patented inventions are shown in Tables 8 and 9, respectively.

Examining Table 8, we observe that over 11 percent (11.2) of the assigned patents required 24 months or more; 5.5 percent 36 months or more before the inventor felt the invention was far enough advanced to be ready for patent application.

Considering this matter for patented inventions classified in terms of commercial utilization suggests that, for those patents issued in 1966 which though not in use for which there were definite indications of early use (according to the inventor), the time requirements to get the invention to a patentable stage of development were by far the greatest. Nearly 42 percent of these inventions (41.6) required 24 months or more to bring them to a stage at which the inventor believed the patent was ready for a patent application; and 17 percent required 36 months or longer. The findings of Table 8 when compared with that of Table 7, for the appropriate column, indicates a much longer developmental time requirement for assigned patented inventions patented in 1966. This is probably a significant difference,[21] with increasing complexity of underlying arts, patentable inventions may require a longer and longer period of gestation just as the validation of a patent application requires a longer time today than it required 10 to 20 years ago.

It should be observed that in Table 7 the time requirements for an invention to be far enough developed to be ready for patent application, based on the judgment of assignee replies, was considerably greater than those reported by the inventor. This differential may turn out to be even larger for patented inventions of 1966, which would mean perhaps over a quarter of these patents required 24 months or more before the invention was sufficiently defined to be ready for filing a patent application. If this were the case, the question arises on

[21] Statistically speaking, the difference is not significant, but it is in the direction that would support the suggested hypothesis. The standard deviation is also larger for the 1966 sample as compared with the standard deviation of the earlier sample suggesting larger variance in time requirements for patented inventions of 1966.

TABLE 8

REPLIES OF INVENTORS OF ASSIGNED PATENTS TO THE QUESTION, "HOW MANY MONTHS ELAPSED BETWEEN THE INITIAL CONCEPTION OF THE IDEA OF YOUR SAMPLED INVENTION AND YOUR DEVELOPMENT OF IT TO A STAGE READY TO APPLY FOR A PATENT?"*

Utilization status	Less than 1 month		1 month through 5 months		6 months through 11 months		12 months through 23 months		24 months through 35 months		3 years or longer		Unknown	Total		In months	
														With unknown	With/o unknown	Mean	Standard Duration
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	No.	No.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
Used patented inventions	6	2.2	111	41.3	78	29.0	46	17.1	15	5.6	13	4.8	51	320	269	8.8	8.9
In current use	6	2.8	87	40.8	63	29.6	35	16.4	11	5.2	11	5.2	43	256	213	8.8	8.9
Used in the past	—	—	24	42.9	15	26.8	11	19.6	4	7.1	2	3.6	8	64	56	8.7	9.0
Not as yet used patented inventions	6	2.9	79	38.2	61	29.5	33	15.9	13	6.3	15	7.2	31	238	207	11.0	22.0
Indication of early use	1	4.2	6	25.0	6	25.0	1	4.2	6	25.0	4	16.6	—	24	24	24.2	56.0
May be used	3	3.7	27	32.9	28	34.1	15	18.3	5	6.1	4	4.9	10	92	82	9.5	10.4
All others	2	2.0	46	45.5	27	26.7	17	16.8	2	2.0	7	6.9	21	122	101	9.1	12.0
Unknown	3	5.9	19	37.3	16	31.4	10	19.6	2	3.9	1	2.0	21	72	51	7.1	9.3
Total	15	2.8	209	39.7	155	29.4	89	16.9	30	5.7	29	5.5	103	630	527	9.5	15.5

* For patents issued in 1966.

what might be the consequences of Commission Recommendation VII if it were enacted into law?

Table 9 gives parallel information for unassigned patents. It indicates that almost 30 percent (29.2) of the patented inventions required 24 months or more before, in the opinion of the inventor, it was ready for a patent application. Almost 17 percent (16.7) required 36 months or more.

For unassigned patented inventions it would seem the developmental time requirement is highest for patented inventions put to commercial use, particularly inventions reported in current use, though these differences are not statistically significant because of the large variance and the comparative smallness of the sample.

Compared with time requirements reported in the earlier Patent Utilization Study by inventors, these requirements are longer for the 1966 sample, thus on the surface, at least, corroborating the same type of findings for assigned patents and enhancing the merits of our suggested hypothesis that with advancing art the average time required to develop an invention becomes progressively longer. Both the mean and the standard deviation of time requirement reported by this sample of inventors of unassigned patents is greater than that obtained from the earlier study. This was also true for assigned inventions, there, too, both the mean and the standard deviations were larger—though as stated, the differences are not statistically significant from the sample sizes that we have.[22]

Putting an Invention to Commercial Use Is not the Only Screen Through which Inventions Are Passed

It would be misleading for the reader to infer that only those inventions that are tried in the market are screened as to their merits before an application is filed; many more are tested in the laboratory. Laboratory tests are applied prior to filing for many inventions which are not market tested first.

---

[22] If true, this supplies another vindication of the assertion by this author and others that inventiveness over time cannot be measured through a count of the number of patents filed for or number of patents granted in different time periods or by different countries—a position staunchly held by late Professor Jacob Schmookler. Schmookler, Jacob, "Patent Application Statistics as an Index of Inventive Activity," 35 *JPOS* 539-550 (1953). See also *The Rate and Direction of Inventive Activity, Economic and Social Factors,* A Report of the National Bureau of Economic Research.

TABLE 9

REPLIES OF INVENTORS OF UNASSIGNED PATENTS TO THE QUESTION: "HOW MANY MONTHS ELAPSED BETWEEN THE INITIAL CONCEPTION OF THE IDEA OF YOUR SAMPLED INVENTION AND YOUR DEVELOPMENT OF IT TO A STAGE READY TO APPLY FOR A PATENT?"*

Utilization Status	1 through 5 months		6 through 11 months		12 through 23 months		24 through 35 months		3 years or longer		Unknown	Total		In months	
												With unknown	Without unknown	Mean	Standard Duration
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	No.	No.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Used patented inventions	5	12.8	11	28.2	11	28.2	4	10.3	8	20.5	4	43	39	38.74	85.89
In current use	5	15.6	8	25.0	10	31.2	3	9.4	6	18.8	2	34	32	42.09	94.31
Used in the past	—	—	3	42.9	1	14.3	1	14.3	2	28.6	2	9	7	23.43	20.07
Not as yet used patented inventions	12	21.4	17	30.4	11	19.6	8	14.3	8	14.3	1	57	56	18.64	22.39
Indication of early use	3	21.4	6	42.9	3	21.4	2	14.3	—	—	—	14	14	11.00	8.30
May be used	6	26.1	6	26.1	4	17.4	1	4.3	6	26.1	—	23	23	23.30	31.09
All others	3	15.8	5	26.3	4	21.1	5	26.3	2	10.5	1	20	19	18.63	15.08
Unknown	—	—	—	—	—	—	—	—	—	—	2	3	1	—	—
Total	17	17.7	28	29.2	23	24.0	12	12.5	16	16.7	7	103	96	26.80	57.79

* For patents issued in 1966.

In the Patent Utilization Study we asked this question of the inventor:

> 14. Was your sampled invention actually produced (in the laboratory or otherwise) to test its feasibility? (check) Yes ____ No ____ Other (specify) ____[23]

The replies indicated that a high proportion of inventions were given laboratory tests as to their workability. In the 1966 inventor questionnaire we asked these questions:

> 18. (a) Was your sampled invention actually made (in the laboratory or otherwise) to test its feasibility? Yes ____ No ____ Other (specify) ____
> (b) How long did such testing or trial take? (months) ____
> (c) Was it market tested? Yes ____ No ____

On whether there had been a laboratory feasibility test the replies of inventors of assigned patents is summarized in Table 10. For the patented inventions that were put to commercial use nearly half (48.5) replied affirmatively to this question. Of the patented inventions not put to commercial use only about 15 percent (14.6) responded affirmatively. This response was highest for those patented inventions for which eventual use was deemed likely, and lowest of all for the residual group of non-used patented inventions.

The time required for laboratory testing (Question 18 [b]) of assigned patents, based on replies of inventors is summarized in Table 11. It should be seen that the mean testing time exceeded 7 months (7.07). In 5 percent of the inventions the testing time was 24 months or longer, the time limit set by the Commission to publish the patent applications filed. The longest testing time is recorded for patented inventions which had not been put to commercial use but for which the inventor felt their commercial utilization was imminent or highly probable. This would suggest that perhaps for the most significant inventions more than average developmental and testing time may be required. Further exploration and inquiry is needed to validate this hunch. For this group of patented inventions the average testing time reported was in excess of 15 months (15.2) and for nearly 17 percent (16.7) the testing period was 24 months or longer.

Table 12 gives the replies of inventors of assigned patents whether their invention was market tested (Question 18[c]). Nearly 36 percent (35.6) answered the question affirmatively—but the affirmative replies were far more common for patented inventions used commer-

---

[23] *Supra* note 18, p. 105.

TABLE 10

REPLIES OF INVENTORS OF ASSIGNED PATENTS TO THE QUESTION, "WAS YOUR SAMPLED INVENTION ACTUALLY MADE (IN THE LABORATORY OR OTHERWISE) TO TEST ITS FEASIBILITY?" RELATED TO UTILIZATION OF THE PATENT AS REPORTED BY THE INVENTOR.*

Utilization Status	Yes		No		Don't know	Total	
						Without the unknown	With the unknown
	No.	%	No.	%			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Used Patented Inventions	147	48.5	156	51.5	28	303	331
In current use	117	48.3	125	51.7	21	242	263
Used in the past	30	49.2	31	50.8	7	61	68
Not Used Patented Inventions	32	14.6	187	85.4	24	219	243
Indication of early use	5	22.7	17	77.3	1	22	23
May be used	15	17.2	72	82.8	12	87	99
All others	12	10.9	98	89.1	11	110	121
Unknown	10	25.0	30	75.0	18	40	58
Total	189	33.6	373	66.4	70	562	632

*For patents issued in 1966.

cially than those not so used. When we consider patented inventions not used commercially we observe a gradient. The percentage market tested among these inventions being relatively highest for those reported not used but highly probable for early use, followed by those where there was some prospect of commercial use, and the lowest for those patented inventions for which no prospect of use was indicated by their inventors. This again suggests qualitative differences in patented inventions which are given extra attention such as market testing and perhaps on the average a longer developmental time period for these.

Table 13 shows the replies from inventors of unassigned patents, whether or not their sampled patented invention was tested as to its feasibility. It is seen that almost 80 percent (78.6) answered the question affirmatively. For patented inventions used commercially the affirmative replies exceed 86 percent, and for those inventions reported in current use commercially, the affirmative replies approximate 89

TABLE 11

REPLIES OF INVENTORS OF ASSIGNED PATENTS AS TO THE DURATION OF TESTING FOR PATENTS, SAID TO HAVE BEEN PRETESTED, RELATED TO THE UTILIZATION STATUS OF THE PATENTED INVENTION AS REPORTED BY THE INVENTOR.*

Utilization Status	Less than 1 month		1 through 5 months		6 through 11 months		12 through 23 months		24 months or more		Time unknown	Total		Duration of testing in months	
												Without unknown	With unknown	Mean	Standard duration
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	No.	No.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Used Patents	15	5.3	153	53.9	60	21.1	45	15.8	11	3.9	24	284	308	6.24	7.83
In current use	11	4.8	123	54.2	49	21.6	37	16.3	7	3.1	21	227	248	5.90	5.88
Used in the past	4	7.0	30	52.6	11	19.3	8	14.0	4	7.0	3	57	60	7.76	12.85
Not Used Patents	15	8.5	82	46.6	34	19.3	32	18.2	13	7.4	20	176	196	8.78	14.40
Indication of early use	1	5.5	6	33.3	5	27.8	3	16.7	3	16.7	3	18	21	15.16	27.80
May be used	6	8.5	36	50.7	10	14.1	15	21.1	4	5.6	6	71	77	7.87	10.46
All others	8	9.2	40	46.0	19	21.8	14	16.1	6	6.9	11	87	98	8.21	13.04
Unknown	6	14.0	23	53.5	10	23.3	3	7.0	1	2.3	8	43	51	5.31	6.13
Total	36	7.2	258	51.3	104	20.7	80	15.9	25	5.0	52	503	555	7.07	9.12

* For patents issued in 1966. Percentages based on patents with a testing time reported, of course the mean and the standard duration is also restricted to these patents.

TABLE 12

REPLIES OF INVENTORS OF ASSIGNED PATENTS TO THE QUESTION, "WAS IT [SAMPLED INVENTION] MARKET TESTED?"*

Utilization Status	Yes		No		Don't know	Total	
						Without unknown	With unknown
	No.	%	No.	%	No.	No.	No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Used patented inventions	147	49.2	152	50.8	28	299	327
In current use	117	49.2	121	50.8	21	238	259
Used in the past	30	49.2	31	50.8	7	61	68
Not used patented inventions	36	16.2	186	83.8	24	222	246
Indication of early use	5	22.7	17	77.3	1	22	23
May be used	15	17.2	72	82.8	12	87	99
All others	16	14.2	97	85.8	11	113	124
Unknown	23	39.7	35	60.3	18	58	76
Total	206	35.6	373	64.4	70	579	649

* For patents issued in 1966.

percent (88.6). These percentages are significantly higher than the percentages reported by inventors of assigned patents. Perhaps in part this reflects the higher elimination of patentable inventions by inventors of assigned patents through actual production for the market, without waiting for a laboratory feasibility test. Or perhaps the level of what constitutes a feasibility test is different for assigned as against nonassigned inventions. For this we need more extensive analysis of information received, and perhaps supplementary information.

Table 14 gives the duration of testing for unassigned patented inventions. For those patents for which this information was supplied in about 15 percent (14.7) the duration of testing exceeded 24 months. The average duration reported was almost 10 months (9.7). For inventions reported commercially used the average was close to a year, 11.2 months, and for patents reported used in the past, 13 months. It is difficult to surmise what would be the impact on such

TABLE 13

REPLIES OF INVENTORS OF UNASSIGNED PATENTS TO THE QUESTION: "WAS YOUR SAMPLED INVENTION ACTUALLY MADE (IN THE LABORATORY OR OTHERWISE) TO TEST ITS FEASIBILITY?" RELATED TO UTILIZATION OF THE PATENTED INVENTION AS REPORTED BY THE INVENTOR.*

Utilization Status	Yes		No		Total
	No.	%	No.	%	
(1)	(2)	(3)	(4)	(5)	(6)
Used Patents	37	86.0	6	14.0	43
In current use	31	88.6	4	11.4	35
Used in the past	6	75.0	2	25.0	8
Not Used Patents	43	74.1	15	25.9	58
Indication of early use	7	58.3	5	41.7	12
May be used	20	80.0	5	20.0	25
All others	16	76.2	5	23.8	21
Unknown	1	50.0	1	50.0	2
Total	81	78.6	22	21.4	103

* For patents issued in 1966.

testing, if first-to-file provisions became a part of our patent law and publication occurred at the end of 18 to 24 months. Certainly, it seems unlikely it would enhance the circumstances for testing of inventions. Again in the absence of empirical facts we presume likely a drastic reduction, if not elimination of such selective procedures, resulting in a flood of poorly conceived and imperfectly delineated claims for inventions which would be likely to increase the volume of applications and litigations at the expense of quality and a painstaking development of the inventions before a patent application is filed.

Finally, Table 15 gives the replies of inventors of unassigned patents to the queston of whether or not the sampled patented invention had been market tested. In all, only about 22 percent who responded to this question responded affirmatively. This is significantly lower than the corresponding percentage in Table 12 for assigned patents. For patented inventions reported in use the time percentages for those in current use and others in past use do not differ from one another significantly.[24]

[24] The different tables for this paper were compiled by different individuals and the minor inconsistencies do not affect our basic conclusions.

TABLE 14

REPLIES OF INVENTORS OF UNASSIGNED PATENTS AS TO THE DURATION FOR TESTING FOR PATENTS, SAID TO HAVE BEEN PRETESTED, RELATED TO UTILIZATION STATUS OF THE PATENT AS REPORTED BY THE INVENTOR.*

	Less than 1 month		1 through 5 months		6 through 11 months		12 through 23 months		24 months or more		Time unknown	Total		Duration of testing (in months)	
												Without unknown	With unknown	Mean	Standard duration
	No.	%	No.	%	No.	%	No.	%	No.	%					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
Used Patents	—	—	18	54.5	8	24.2	3	9.1	4	12.1	5	33	38	11.2	20.13
In current use	—	—	16	55.2	7	24.1	3	10.3	3	10.3	3	29	32	10.9	20.64
Used in the past	—	—	2	50.0	1	25.0	—	—	1	25.0	2	4	6	13.0	18.45
Not Used Patents	1	2.9	19	55.9	7	20.6	1	2.9	6	17.6	9	34	43	8.4	11.93
Indication of early use	—	—	4	66.7	1	16.7	—	—	1	16.7	1	6	7	7.2	9.03
May be used	1	5.9	7	41.2	4	23.5	1	5.9	4	23.5	3	17	20	10.9	14.94
All others	—	—	8	—	2	—	—	—	1	—	5	11	16	5.0	6.79
Unknown	—	—	—	—	1	—	—	—	—	—	—	1	1	—	—
Total	1	1.5	37	54.4	16	23.5	4	5.9	10	14.7	14	68	82	9.7	16.31

* For patents issued in 1966.

This brief (and incomplete) analysis has raised serious questions regarding the soundness of a few of the recommendations made by the Commission. The present investigator feels that search should be intensified and continued for testing the merits of these and other recommendations before they are incorporated into our patent laws.

TABLE 15

REPLIES OF INVENTORS OF UNASSIGNED PATENTS TO THE QUESTION, "WAS IT [SAMPLED INVENTION] MARKET TESTED?"*

	Yes		No		Don't know	Total	
						Without unknown	With unknown
Utilization Status	No.	%	No.	%	No.	No.	No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Used patented inventions	16	44.4	20	55.6	6	36	42
In current use	15	48.4	16	51.6	3	31	34
Used in the past	1	20.0	4	80.0	3	5	8
Not used patented inventions	6	10.7	50	89.3	4	56	60
Indication of early use	1	7.1	13	92.9	—	14	14
May be used	5	21.7	18	78.3	2	23	25
All others	—	—	19	100.0	2	19	21
Total	22	21.6	70	78.4	10	92	102

* For patents issued in 1966.

Mistaken Assumptions of the High Cost of Interference*

HENRY VAN ARSDALE

SUMMARY

The following article comprises information collected on the costs to the parties of contesting interferences in a number of cases spanning the last ten years. It was found that the expenditures needed to prove that one of the parties is entitled to patent protection are substantially less than commonly assumed and that the right to contest priority is an important incentive to the innovative efforts of numerous inventors and small firms. Looking at interference practice on the basis of "costs" vs "benefits" it would seem that the latter far outweigh the former.

For over 100 years the patent laws of this country have required the Commissioner of Patents to institute interferences between pending

* The PTC Research Institute regrets to announce the death of the author, a Consultant on this Institute.

applications, and between one or more applications and a patent. It is provided in 35 U.S.C. 135 as follows:

> (a) Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be. The question of priority of invention shall be determined by a board of patent interferences (consisting of three Examiners of interferences) whose decision, if adverse to the claim of an applicant, shall constitute the final refusal by the Patent Office of the claims involved, and the Commissioner may issue a patent to the applicant who is adjudged the prior inventor. A final judgment adverse to a patentee from which no appeal or other review has been or can be taken or had shall constitute cancellation of the claims involved from the patent, and notice thereof shall be endorsed on copies of the patent thereafter distributed by the Patent Office.
>
> (b) A claim which is the same as, or for the same or substantially the same subject matter as, a claim of an issued patent may not be made in any application unless such a claim is made prior to one year from the date on which the patent was granted.

Before declaring an interference, Rule 202 of the Rules of Practice in patent cases requires as follows:

> *Preparation for interference between applications; preliminary inquiry of junior applicant.* In order to ascertain whether any question of priority arises between applications which appear to interfere and are otherwise ready to be prepared for interference, any junior applicant may be called upon to state in writing under oath the date and the character of the earliest fact or act, susceptible of proof, which can be relied upon to establish conception of the invention under consideration for the purpose of establishing priority of invention. . . . In case the junior applicant makes no reply within the time specified, not less than thirty days, or if the earliest date alleged is subsequent to the filing date of the senior party, the interference ordinarily will not be declared.

The above requires the Examiner, when an application is ready for allowance, to search other pending applications to ascertain whether there are any that are claiming the same subject matter, or whether there are any recent patents having claims to the subject matter. If he finds such he must send out the notices under 35 U.S.C. 135 and follow the procedure outlined in Section 202 of the Rules of Practice. All this takes time of the Examiner which he could otherwise devote to the prosecution of other pending applications.

After the declaration of interference, the interference proceeding may be terminated promptly, for instance, by either or both parties filing permissible motions such as: to dissolve, to add counts, or to assert the other party has no right to make the claim, etcetera. The

costs to the parties involved in an interference proceeding may vary to a great extent. For example, the senior party may merely rely for his proofs on the filing date of his application, in which event the costs to that applicant or patentee would be very low. Also, the costs of prosecuting an interference which is terminated by a settlement between the parties without the taking of any testimony would usually be quite moderate. On the other hand, a lengthy prosecution of an interference by the presentation of proofs would normally be quite costly.

The President's Commission on the Patent System has recommended that all the above activity on the part of the Patent Office and the applicants, or patentees, should be eliminated by the abolition of interference proceedings in the Patent Office. Instead the Commission recommended granting the patent to the first to file an application for the invention without opportunity for any other applicant to assert priority of invention. The Commission is of the opinion that "it is as equitable to grant a patent to the first to file as to the one who wins an interference," and that, "the first to file is more apt to be the inventor who first appreciated the worth of the invention and promptly acted to make the invention available to the public." These observations will be considered hereafter.

One of the aims of the U.S. patent laws, which have been in existence for more than 100 years, is to grant the patent to the first inventor. In cases where there are two or more applicants claiming patents for the same invention, the parties are given an opportunity to prove their dates and the patent is awarded to the earlier if he has been diligent. It should be recognized that the number of applications that become involved in interference is a very minor proportion of the applications filed (1 percent or less), and that of the interferences which are declared the great majority of decisions of priority (possibly four out of five) are in favor of the party who was first to file.

This situation leads to a question: Would abolition of the right to contest priority with another detract from the incentive to invent and to develop inventions to a practicable form? A concern would be that somebody else might invent the subject matter subsequently and obtain a patent on it, or might even get wind of the first inventor's idea and obtain a patent on it even though obliged to swear that he was the first, sole and original inventor. How much this concern would interfere with the incentive to invent and develop inventions is uncertain. Looked at purely from a statistical point of view, it would be small. As noted earlier over 99 percent of applications filed are not involved in interferences at all and the senior party usually prevails in

those cases where an interference is declared. But is a statistical analysis appropriate? It would seem that one must look also at how most innovators would behave if interference practice were abolished, since this behavior would affect the flow of new products and processes into our economy.

Certainly, granting the patent to the one who files most promptly would encourage early filing. However, it could deter the first inventor, and in fact inventors in general, from striving to perfect their inventions before filing. This would be undesirable.

Of course, the first inventor would have some options. He could always defend an infringement suit brought against him by asserting and proving his claim to prior inventorship to defeat the patent. Also, he could raise the issue in a declaratory judgment suit if he could show that the existence of the patent was damaging him in any way. Nevertheless, the first inventor would not receive a patent and the accompanying monopoly on the invention.

Next we ask whether general recognition of this fact would change the attitudes and behavior of the many thousands of innovators who are concerned with the patent system, but rarely become involved in an interference. The term "innovator" as used here comprehends those who play a significant role in the creation, development, testing or production of the invention. The writer believes that many times inventions are pursued diligently by such persons prior to the actual filing of the application and that such pursuit is in the public interest.

For example, an independent inventor has limited funds available for procurement of patents, yet such persons are fertile sources for new and ingenious ideas. Today, relying upon their date of invention, they can carry out experiments directed to perfecting the invention and can even approach large firms seeking financial support and/or production and marketing facilities. When enough information on the most promising concept has been gathered, a well-drawn application can be prepared which will define and protect the innovation. The fact that present patent laws permit this desirable period of investigation is relied upon by numerous inventors. It results in carefully drawn patent applications and reduces the costs of patenting. Small business firms have more resources than inventors; nevertheless, they also are limited in the expenditures they can devote to obtaining patents. Hence they often delay filing until tests and market surveys tell them the invention has a reasonable chance of success. A beneficial "by-product" of this strategy is reduction in the number of applications filed on inventions which do not contribute to the economy.

Where does this leave the situation? On the one hand it seems clear that abolition of interferences would:

(1) Save time of the Patent Office examining and clerical force;
(2) Avoid delays in the time when the patent is issued;
(3) Save the expenses of prosecuting interferences;
(4) Deprive very few inventors of patent protection.

These four "effects" led the Commission to its conclusion that abolition of interference practice would be desirable. Certainly one can agree with the need for, and the importance of, the first two effects listed. Nevertheless, the writer, based on his experience, has been of the opinion that a positive effort should be retained to issue the patent to the first inventor even though involving interference proceedings. To verify or disprove this belief he undertook a study of the costs and values of interferences as revealed by firms, complemented by data compiled by the experts in the U.S. Patent Office, and other sources.

Statistics and information were accumulated along the following lines:

(1) The number of interferences declared in proportion to (a) the number of applications filed, (b) the number of patents issued, and (c) the number of companies contacted;

(2) The number of interferences terminated without official award of priority;

(3) The number terminated by settlement between the parties;

(4) The number terminated by decision of the Patent Office, or by decision of a court;

(5) The duration of the interferences;

(6) The cost to the party reporting;

(7) The number of interferences in which the senior party prevailed;

(8) The effect, if any, of the pendency of the interferences on the research, development and other activities regarding the subject matter, of the party reporting the interference.

The sources of the statistics were answers to questionnaires sent to 365 companies and 61 universities and nonprofit foundations, from statistics found in the Annual Report of the Commissioner of Patents for the fiscal year 1966, and from statistics supplied by cooperating experts in the Patent Office. Also, attention was given to information and comments voiced in recent hearings on the Presidential Commission's Report.

Of the 365 companies and 61 universities and foundations questioned, 19 companies and seven of the academic institutions reported

they had been involved in interference proceedings. The companies reported involvement in 33 interferences and the institutions reported involvement in eight interferences. The companies responding were part of a "sample" of medium-sized firms and smaller firms who had earlier indicated actual experience with interferences. Thus, major firms, such as General Motors and Eastman Kodak, were not included. The latter organizations have the financial and legal resources to prosecute interferences where involved. Thus it seemed more profitable to find out whether interferences constituted a substantial burden on smaller competitors. The above statistics obtained show that of those questioned only about one-half of one percent of the companies, and about three-quarters of one percent of the institutions, have been involved in interference proceedings.

This data is generally consistent with that supplied by the Patent Office; for example, with respect to the applicants for patents and patentees, it is reported that in the fiscal year 1966, 93,391 applications were filed; 66,578 patents were issued, and only 435 interferences were declared.

Of the 41 interferences reported, the pendency of the interferences changed the research and development activities in only two instances, and in the licensing position in eight instances. Thus it appears that usually the involvement of a company in interference proceedings has no effect on the research, development and other activities relating to the invention. These continued activities are encouraged by the opportunity given the parties under the present law to prove prior inventorship and, if successful, to be awarded the patent.

Statistics show that in about 80 percent of the cases the interference was resolved in favor of the senior party, and in 20 percent, to the junior party. In only one instance, a split decision was reported.

Of the 41 interferences that were reported, 21 were terminated by decision of the Patent Office, one by decision of a district court, 15 by settlement between the parties, three still pending and one abandoned.

The cost of prosecuting the interferences to the companies reporting varied over a wide range: two companies reporting $300, and one company reporting $40,000 with the interference still pending. Eight companies reported $1000 or less, five reported between $1000 and $2000, four reported between $2000 and $5000 and six reported above $5000.

The duration of the interferences reported by respondents to the questionnaires also varied widely—from six months to eight years. It should be noted that all of those interferences came under the old

rules of practice which were replaced by new rules as of July 1, 1965. Evidently these long time periods no longer hold true because statistics received from the Patent Office state that the pendency of interferences terminated during fiscal year 1966 (July 1, 1966 to June 30, 1967) were as follows: one year, 88; two years, 57; three years, 0.

Company officials recognize that interferences may be costly and prolonged. Hence their decisions to seek or prosecute an interference are based largely on affirmative answers to the following two questions:

(1) What are our chances of prevailing?

(2) If we succeed, will the patent be valuable?

The first question requires a judgment by legal counsel based largely on the dates of conception of the parties and their diligence in development and filing. The second involves a study of production and distribution costs and the potential market for the product.

If one party saw there would be little value in the patent or that it had only a slim chance of prevailing in the interference, the party probably would not care to undertake the expense of prosecuting the interference. In such instances they would prefer to have it terminated by settlement, conceding priority, abandoning the contest or by defaulting. On the other hand, if the company thought that the patent would be extremely valuable to it, that company would most likely prosecute the interference regardless of expense. It is believed that this accounts for the wide variation in the costs of interferences and in the length of their duration.

The fact that one interference proceeding out of five is resolved in favor of the junior party encourages filing of applications when the invention looks promising. Also, the fact that four times out of five interferences are determined in favor of the senior party, encourages the early filing of applications. Thus it appears that interference practice, as presently carried out, encourages early filing of worthwhile inventions.

The principal advantage of an interference proceeding is that it gives a junior party opportunity to establish in the Patent Office priority of invention and to be awarded the patent accordingly. Thus it gives the inventor time after his first reduction to practice to develop the invention further into a more finished and acceptable form before filing a complete application. An objection is that it gives the inventor a chance to unduly delay the filing of the complete application and thus delay the date of issuance of the patent. It has been proposed that the dates governing priority awards should be limited to a specific

period such as one, two or three years prior to the filing of the application. Such a limitation would overcome the above objection.

In commenting on the value of interferences, a leading chemical firm commented as follows:

> One of the features of Interference practice is that it is an incentive to spending considerable sums of money in bringing invention from the the laboratory to the public. The fact that a company knows its success in obtaining a patent may be influenced by its diligence in developing and marketing an invention encourages the company to underwrite such developments and marketing. On the other hand if interference practices were abolished the question of a company's diligence in perfecting the invention and bringing it to the public would be of no importance.

Current interference practice, as now administered by the Patent Office, requires the Examiners to search for conflicting applications and, if any are found, to enter into correspondence with the applicants to determine whether or not an interference should be declared. It would be beneficial to relieve the Patent Office of the burden and expense of this practice. One method suggested is to retain the policy of granting patents to the first inventor but to issue the patent to the first to file with opportunity to anyone believing himself to be the prior inventor to ask for the declaration of an interference. Such a change of practice would tend to reduce the number of interferences that are now being declared. The writer broadly favors such a change in the interference practice.

In closing let us look at the "pros and cons" of interferences as developed in this paper. It is certainly true that the prosecution of an interference:

(1) Costs money;
(2) Delays issuance of the patent;
(3) Places a burden on the Patent Office staff.

It is equally true that:

(1) 99 percent of all applications filed do not become involved in interferences;

(2) The time period of the average interference has been reduced substantially by the rules adopted recently by the Patent Office;

(3) That, except for rare instances, the costs of interferences to the parties are not excessive. Further, that these costs vary directly with the value the party places upon the invention he is seeking to protect;

(4) That many small firms and independent inventors consider

the right to contest priority to be an important incentive to their innovative efforts.

The writer contends that point 4 above outweighs in significance the present costs, delays and workloads relating to interference practice. In other words, preservation of the first inventor principle produces greater benefits than burdens. In addition, it is believed that the information collected in this study reveals that the burdens under current and conventional practice have been exaggerated. Last, it is pointed out that they will be diminished further if the Patent Office adopts recent proposals to transfer the initiative in setting up an interference from the Office to the parties.

Patent Protection for Computer Software: Implications for the Industry

HERBERT R. KOLLER* AND JACK MOSHMAN**

INTRODUCTION

THE CURRENT CONTROVERSY over whether computer software inventions either are or should be subject to the protection of the United States Patent Laws (currently Title 35, U.S. Code) has been brought into focus by a number of bills introduced in the 90th Congress.[1] These legislative proposals were triggered by the November 1966 *Report of the President's Commission on the Patent System.* However, the software patent issue is not new since it has been under consideration by the Patent Office and the practicing Patent Bar for over a decade, and a substantial body of literature has already been published on various aspects of the controversy.

Several problems present themselves at the onset. First of all, there are several views of what is meant by software; second, it is still not

* Project Research Associate, The PTC Research Institute; Principal Information Scientist, Leasco Systems and Research Corporation, Bethesda, Maryland.

** Project Research Associate, The PTC Research Institute; Vice President, Leasco Systems and Research Corporation, Bethesda, Maryland.

[1] House of Representatives, 5924, 6043, 6975, 7454, 10006, 10027, 11447, 13951, all 90th Cong., and Senate 2, 1042, 1377, 1691, 2164, 2597, all 90th Cong.

certain that the existing statutes include this type of invention within any of the stated statutory classes, and while the Patent Office has consistently maintained the position that they are not included, no relevant case has yet been adjudicated by the courts; third, if it is granted that such inventions do fall within one of the statutory classes, there exist uncertainties about the most appropriate ways of disclosing and claiming such inventions; fourth, there is a problem of whether any software patents have in fact already been issued, inadvertently or otherwise; fifth, whether there may not exist several distinguishable types of software inventions, some of which are or should be patentable, while others are or should not be; sixth, there are questions dealing with whether it is possible to provide adequate means of classifying, searching, and examining applications in this area so that issued patents would carry the same presumption of validity as they do in other arts; and seventh, the question of whether alternative forms of protection may not be more suitable than can be provided by the patent system.

Further issues have been identified which are probably not as substantive as these seven, and which bear more on social and economic aspects of the problem than on the strictly legal or procedural aspects. Among these might be included: Difficulties in detecting infringement; antitrust or monopoly considerations, based on the current practice of computer manufacturers who supply programs with their machines at no extra cost to the user; the question of whether the patent system can accommodate to new, all-pervasive technologies; the potential effects on the U.S. patent system of some foreign patent systems (e.g. Australia and the United Kingdom) extending patent coverage to software inventions, which is of concern because of recent international developments, such as the proposed Patent Cooperation Treaty; and finally, there are the economic and other effects which granting or denying patent coverage to software would have on different segments of the computer industry.

The computer industry, as that term is used here, includes: hardware manufacturers; independent software houses; commercial, research and industrial users of computers, including computer service bureaus; independent inventors; the academic community; computer programmers as individuals; and the patent Examiner, the patent attorney, and the several courts which are confronted by patent questions. The probable consequences of (1) providing or denying patent protection for software inventions, or (2) forcing the industry to resort to other forms of legal protection, may differ for each of these

segments of the industry. Many of these probable effects have been identified and discussed by previous authors, by the President's Commission, and by parties testifying before Senate and House Committees which have held hearings on the proposed legislative changes. It is unfortunate that trade associations in two key portions of the industry (namely, the software houses[2] and service bureaus[3]) which have been considering the questions addressed here, have not yet at the moment of writing this paper, been able to supply any consensus of their members.

Before discussing the implications of the several possible outcomes of the software patent controversy, it will be useful to high-light some of the arguments which have been raised relative to the dual question: (a) are software inventions patentable under the existing law? or (b) should they be accorded patentability (or excluded from coverage) in an amended version of the patent statutes? The relationships between (a) and (b), it will be observed, are more complex than may be first apparent. For example, if the answer to (a) is affirmative, the correct answer to (b) must be sought out by legal, cost/benefit, and public policy determinations. On the other hand, if (a) is to be answered affirmatively, then (b) must be answered by considering (in addition to legal, cost/benefit and public policy aspects) the question of whether it is desirable to remove from the scope of the patent laws inventions in a new field, which has been recognized by specialists in the physical and behavioral sciences, economics, industrial engineering and other areas, as having an influence on the human condition at least as profound and widespread as that of any previously emerged new technology.

The Present Law

A good deal of the writing published prior to the President's Commission Report was directed at demonstrating that programming and software inventions fall within one or another of the statutory classes, or that they fall within none of the existing statutory classes. One is tempted to suggest that if the latter is the correct view, and if it is considered desirable to accord patent protection to software inventions, then Congress should add to the statute an additional class, appropriately named, the scope of which will ultimately be deter-

[2] *Data Processing Magazine* (June 1968), p. 12.
[3] *Datamation* (May 1968), p. 103.

mined by the courts as they have in the past for the existing classes on a case-by-case basis.

Arguments have been brought forward to prove that software inventions are or are not patentable as being processes, machines, new uses for old machines, elements of machines, algorithms, mental processes, and even designs. Most of the arguments revolve about whether computer programs are processes or machines, although recognition of the equivalence of hardware and software has increasingly emerged. It has long been believed by professional computer people that almost any computing technique can be embodied in either a special-purpose computer or in a properly programmed general-purpose computer. That a programmable general-purpose computer is inoperative without a viable program has also been pointed out, or, as one author has succinctly stated it, "a general-purpose computer is nothing without a program; the program thus determines what it is, not what it should do."[4] The distinction between a programmable and a non-programmable machine has been pointed out as more meaningful than the distinction between general-purpose and special-purpose computers.[5] Differences have also been noted between algorithmic programs, which manipulate data, and utility programs, which serve to manipulate or control physical processes or equipment.[6] In a different context, a similar distinction has been drawn between data processing computer programs and process control programs.[7] Finally, at least one publication has attempted to distinguish between processes and techniques.[8]

All of the above arguments on patentability which involve statutory classification are, in a sense, academic. So far as is now known, no case has come before the courts in which the issue being litigated has been patentability in the light of statutory classes of invention. This is one result of the consistently maintained position of the Patent Office that software inventions are not patentable. That the Patent Office has also mentioned difficulties which would exist in classification, searching and examination if another position were adopted is not relevant.

At least two patents (Hamburgen, U.S.P. 3,333,243, July 25, 1967)[9]

---

[4] Hearings before Committee on the Judiciary, House of Representatives, 90th Cong., on H.R. 5924, H.R. 13951 *et al.*, Part 1. (Washington, D.C.: G.P.O. 1968).

[5] Galbi, *Patent Law Annual* (1967), pp. 147-183.

[6] John F. Banzhaf III, *Data Processing* (January 1965), p. 13.

[7] *Supra* note 5.

[8] "First Software Patent," *Computer World* (July 3, 1968), p. 4.

[9] A. Hamburgen, Inventor, Detection and Correction of Transposition Errors (3,333,243), Filed September 16, 1963, July 25, 1967.

and Goetz, (U.S.P. 3,380,029, April 23, 1968) [10] are said to be directed to software inventions.[11] Other data processing patents have been said to have issued on "processing radar signals to produce moving target indicator displays, to enhance seismic data by filtering and stacking or combining traces, to narrow the beam of a radio transmitter to make it more directional, to increase signal-to-noise ratios in receivers, and to transmit secure communications. Analog or digital machines, which are, in the broadest sense, computers, carry out these processes, which are then computer programs."[12] A patent to Swafford (U.S.P. 2,907,-400, October 6, 1959) has been described by one writer as containing a disclosure of an analog apparatus, with at least one claim to an analog process. It is argued that since the steps of the process "could be implemented equally as well with digital techniques as with the analog equipment disclosed in block form in the patent application, a strong argument can be made that the claim would cover programming of a digital computer to carry out the above steps."[13]

The difficulty with accepting these examples as proof that software patents have, in fact, been issued, is that, in every case which has come to our attention, the invention is claimed in conventional process language, or the means-plus-function form (usually construed as apparatus) is used, or the claim language is so broad as to read on process, apparatus or program embodiments. In other words, claims in which a computer program is defined in any of the several forms which a computer programmer would agree are statements of programs have not yet (to our knowledge) been allowed.

To summarize the situation now existing, there are three possible sources or authorities for precedence in this area, namely, statutes, case law, and Patent Office practice. The first of these must be considered as ambiguous, or at least open to argument. There are no examples of case law which are apropos without (probably unmerited) extrapolation and inference. Finally, unless the statutes are changed or the Patent Office changes its present viewpoint, its current policy of not issuing software patents will prevail. The only alternative for applicants who would strongly urge a change in policy is the usual one of appeal within the Patent Office on the issue of statutory coverage, and failing there, further appeal to the courts.

---

[10] Martin A. Goetz, Inventor, Sorting System (3,380,029), Filed April 9, 1965, April 23, 1968.

[11] "Software Patent Raises Questions," *Computer World* (June 19, 1968), p. 2.

[12] James O. Dixon, *Patent Law Annual* (1967), pp. 187-189.

[13] Richard E. Kurtz, *Data Processing Magazine* (November 1964), pp. 9-13.

Proposed Changes in The Law

The President's Commission Report recommended that:

> IV (3). A series of instructions which control or condition the operation of a data processing machine, generally referred to as a "program," shall not be considered patentable regardless of whether the program is claimed as: (a) an article, (b) a process described in terms of the operations performed by a machine pursuant to a program, or (c) one or more machine configurations established by a program.[14]

The Administration bill, which sought to embody the Commission's recommendations into law, employed slightly different language, perhaps broader than that of IV (3), but presumably with the same intent. It read:

> Section 106. Computer programs not patentable.
> A plan of action or set of operating instructions in whatever form presented, to cause a controllable data processor or computer to perform selected operations shall not be patentable.[15]

Most subsequent versions of the bill, in both the House and the Senate, contained no provision addressed to the patentability of computer programs. One or two of the later bills (e.g. H.R. 7454) contained language identical with that of 106, quoted above, but designated as Section 105. In the rest of this paper, the proposed exclusion will be referred to as Section 106.

The testimony presented before both houses on these bills was preponderantly opposed to exclusion of software from protection of the patent laws. Generally the point was made that it would be a premature action at this time, and that further operation under the existing laws and further study of the problem were in order in view of the newness of the technology. Testimony on Section 106 has been presented by the Commissioner of Patents, one former Commissioner, representatives of other federal agencies, software houses, the Patent Bar, an association of independent inventors, and organizations representing big business and small business.

A substantial number of specific and complex issues have been raised in opposition to enacting Section 106 into law. For example, it is claimed that large companies, particularly the computer manufacturers, would be accorded a continuing unfair advantage over smaller companies, and, in particular, the software houses. This point will be

---

[14] *Report of the President's Commission on the Patent System.* (Washington, D.C.: G.P.O. 1966.)

[15] *Supra* note 1 (House of Representatives Hearings).

discussed in a later section of this paper. Another argument against adopting Section 106 is that, except for a rather confined restriction in the Atomic Energy Act, there is no precedent for statutory exclusion of an entire technology.[16] It is also urged that no science or technology should be singled out for exclusion from the patent laws.

Some of the opposition to Section 106 which is based on prematureness stems from a feeling that definitional uncertainties inherent in the wording of that provision cannot be readily resolved in the present early phase of the technology. Such terms as "plan of action," "set of operating instructions," "controllable data processor," and even "computer" and "computer program" are susceptible to widely varying interpretations. On the other hand, it has been the function of the Examiners and the courts to construe the meaning of legal expressions since the inception of the patent system, and there is no substantial reason for assuming that, in time, the scope of these terms would not come to be well understood.

In a related argument, it is proposed that the now unlitigated question of whether software inventions fall within the present statutory classes should also be determined by the courts.

Prematurity as a reason for opposing Section 106 has also been based on the lack of meaningful alternative forms of legal protection. At present, copyright registration is available, but has been little used due to the lack of protection for the conceptual aspects of a program, the difficulty of detecting infringement, and the ease of obtaining benefits of another's work by plagiarism or theft. Trade secrecy has been most commonly used to protect proprietary programs. In cases where the owner of such a program licenses it for use by others, the license or lease agreement will typically contain restrictions on disclosure to outside parties. This contractual protection may be viewed as a form of trade secrecy in which the circle of confidentiality is enlarged and delineated by contractual agreement. Adoption of Section 106 would tend to perpetuate trade secrecy as the preferred method of protection. This is in conflict with one of the basic aims of the patent system, namely, to benefit the public by encouraging the disclosure and widespread dissemination of new technological developments.[17] In testimony presented by the Commissioner of Patents subsequent to his original comments on Section 106, it was urged that, if the provisions of this section are not included in any legislation which is enacted, the

[16] Hearings before Committee on the Judiciary, House of Representatives, 90th Cong., on H.R. 5924, H.R. 13951 *et al.*, Part 2 (Washington, D.C.: G.P.O. 1968) at p. 645.

[17] *Id.* at p. 719.

legislative history reflects the view that this omission should not be construed as a judgment on the patentability of computer programs. It was implied that the omission would, instead, reflect the prematurity of formalizing a position on this question in view of the many unresolved problems which now exist.[18]

Arguments in favor of Section 106 or in favor of the principle it would establish have also been presented. They fall in two categories, both of which were put forth in the Report of the President's Commission.[19] One relates to difficulties faced by the Patent Office in examining applications on programming inventions because of the lack of a classification technique and the requisite search files. Even if these were available, the large volume of prior art being generated would make reliable searches unfeasible or uneconomic, and the issuance of patents on these inventions would amount to a mere registration with an all but nonexistent presumption of validity. These points have been answered by several writers[20] and Congressional witnesses.[21] They point out that the Patent Office has always previously met this challenge when new arts have emerged, and that there is already a substantial body of expertise within the Examining Corps. Moreover, because of the close interplay between hardware and software and the equivalence which is possible between these two aspects of computing, it is necessary that the software art be searched as part of the examination of hardware applications. Otherwise, either hardware patents must issue without a complete search (with a lowered presumption of validity), or computer hardware inventions should also be treated as non-statutory.[22] In addition, if one frequently predicted consequence of adopting Section 106 materializes, secrecy would be encouraged, new development and innovation in the software area would be stifled, and progress toward solving the pressing information storage and retrieval problems of the Patent Office might be seriously inhibited.[23]

The other justification stated by the Commission for Recommendation IV (3) was that the creation of programs has undergone substantial and satisfactory growth in the absence of patent protection,

---

[18] *Id.* at p. 532; and Hearings before the Subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary, U.S. Senate, Part 2 of 2 (Washington D.C.: G.P.O. 1968), at p. 394.

[19] *Supra* note 14 at p. 13.

[20] *Datamation* (March 1968), pp. 119-121; and Robert O. Nimtz, "Computers, Programs and the Patent Laws," *IDEA*, Vol. 11, No. 2 (Summer 1967), pp. 199-219.

[21] *Supra* note 4 at p. 202.

[22] *Supra* note 16 at p. 644.

[23] *Id.* at p. 768.

coupled with the observation that copyright protection for programs is presently available. (While the latter point is not open to dispute, substantial deficiencies reside in use of copyrights to protect software inventions, as has been noted above. While a large number of papers have been published on programs and copyrights, and a substantial quantity of testimony has developed on proposed revisions to the copyright law, this subject matter is considered to be outside the scope of this paper and will not be further treated here.)

Whether the growth of the software industry has been satisfactory or has been inhibited by existing conditions is a matter of opinion which differs widely from one segment of the industry to another. In general, the computer manufacturers appear to benefit from the status quo, whereas users are confronted by a mixed blessing, and the software industry appears to feel at a competitive disadvantage compared with the computer manufacturers under today's conditions.

Consequences for the Industry of Providing or Denying Protection

This section considers the effects on the computer industry (as defined earlier) of providing or denying patent protection for computer software. Whether this is accomplished through statutory provision, judicial decision, Patent Office Rules of Practice, or any other available regulatory mechanism would seem to be immaterial since the consequences would, in each case, be essentially the same. The effects to be considered here are primarily economic, relating to the impact on costs to users for services which result from the employment of programmable devices, and to the stimulation of growth, fair competition and innovation in the industry.

It must be recognized that if patent protection is ultimately provided for software inventions, then the effects which will be discussed are speculative since we have no experience with that kind of patent. As described above, existing patents which have been alleged to cover software inventions are not clear-cut examples because of the claim formats employed.

Likewise, if we assume that patent protection is denied to this art, we should recognize that because the situation is so complex, no in-depth factorial analyses based on valid data have been made which sufficiently account for the existing competitive situation within the industry. Therefore, arguments raised for or against patent protection which are based on the public policy of fair competition, and the

stimulation of growth and innovation cannot be either substantiated or disproven.

It has been alleged that, as in other industries, the marketing protection which patents would offer would stimulate the computer industry, although some,[24] but not all,[25] have contended that progress has, up to now, been satisfactory and that the industry has grown at a rate which could not have been predicted even two decades ago.[26] Assuming that the industry would benefit, it is not clear which segments stand to gain most.[27] Lack of protection has been pointed out as responsible for stagnation of software development.[28] A mixed position stated by an executive of a major software house is that while it may not be clear that patents would protect proprietary software packages, such a provision might provide at least some psychological advantages.[29] The general consequences of providing protection for programs have been summarized as promoting the progress of science and the useful arts (the goal expressed in the Constitution) by encouraging programmers to release programs not heretofore shared through providing a guarantee that the results of creative effort can be traded in the marketplace like any other valuable commodity in a free enterprise system. That is, the prospects of recovering leasing fees, and the likelihood of recovering the high costs of software development would act as incentives for new developments.[30] While this has been set forth as an encouragement to service bureaus, it would hold just as true for the software houses and perhaps for industrial users in industries where competition is less "cut-throat" than in others.

Some potential effects on computer users of patent protection or denial have also been noted. If software patents were obtainable, a user (or programmer) would have to determine whether the program techniques he wanted to employ were patented, and obtain licenses where required, even if the technique were only of slight use to him. Otherwise, he would be forced to "program around" the patented techniques. Either of these routes would tend to result in higher user costs and the use of inefficient programs.[31] If, on the other hand, the

---

[24] *Supra* note 14.

[25] *Supra* note 18 (U.S. Senate Hearings) at pp. 751-753.

[26] *Supra* note 14.

[27] Leon Davidson, *Computers and Automation* (May 1968), pp. 12, 13; and E. C. Witt, *Datamation* (November 1967), p. 15.

[28] *Electronic News* (February 5, 1968); Richard C. Jones, *Datamation* (September 1967), p. 160; and John Wessler, *Electronic News* (May 8, 1967), p. 36.

[29] *Electronic News*, Sec. 2 (April 29, 1968), p. 62.

[30] John F. Banzhaf III, *Data Processing Magazine* (July 1964), pp. 8-12.

[31] *Harvard Law Review* (May 1968), pp. 1541-1557.

current situation (no patent protection available) continues to prevail, with the computer manufacturers supplying software to users of their equipment, unless they are pressed harder to make that "no extra charge" software more effective and more efficient than much of what they supply at present, a need will continue to exist for better software. The difficulty has been that as computers continue to become more complex, the satisfaction of programming requirements becomes more difficult to achieve as well as more expensive. If software houses were to develop more efficient systems than the manufacturers, it would have to be so good that a customer would be willing to pay twice for software, once to the equipment manufacturer for relatively inefficient software, and again for the software house's superior product.[32]

This current practice, namely, offering software as part of the package when computers are leased or purchased has been described as harmful to the health of the computer industry, and the question has been raised as to whether software should be sold separately from hardware.[33] All segments of the industry can attest to the high cost of programming, so it is acknowledged that since the manufacturers expend considerable resources in supplying software, and since they make it available to users of their machines without additional charges to them, the cost of such development work is passed along to the user as part of the machine charges. The costs attributable to software for the industry as a whole have been variously estimated as being from 40 to 60 percent of all costs (hardware included), and are probably increasing relatively faster than hardware costs. Some manufacturers have claimed that they spend a much smaller portion of their resources on software, so the evidence is not clear. One manufacturer has offered to supply COBOL compilers at a fixed price, separate from their machines, while continuing to include FORTRAN on a "free" basis.[34]

The manufacturers, of course, want their equipment to be as easily useful to their customers as possible, particularly since there is strong competition in the field. From the early days of the industry, programming skills have always been scarce and new users have been encouraged to take advantage of assistance from computers by the apparently easy availability of manufacturer-supplied systems and application programs. We should also point out that the manufacturers have

---

[32] David Bender, *Columbia Law Review,* Vol. 68, No. 2 (February 1968), pp. 241-259.

[33] Carl H. Reynolds, *Data Processing Magazine* (May 1967), pp. 50, 51.

[34] *Id.*

encouraged the so-called "user groups" in their exchange and development of programming developments. User groups have been formed, in various instances by people having the same machine, or those using the same programming languages, or, more recently, those using the same applications systems.

That manufacturers themselves do not develop all of the software which they supply to customers indicates that hidden software profits may not be as extensive as some would believe. It is a widespread practice for manufacturers to contract with software companies for a substantial part of this work. The product of this contract becomes the property of the manufacturer but the software house gains in two ways: through income derived from the contract, and through the internal accrual of programming skills and knowledge by its programming staff. In some software houses this has been a major source of income. What the software companies have complained about is that because such a large proportion of the systems programs used are supplied by manufacturers, it places the software houses at a competitive disadvantage. The latter cannot afford the necessarily high development costs since the absence of patent protection makes the return on their investment too problematical. They, therefore, put their skills to other uses and do not compete with the manufacturers in this area. On the other hand, since so much of the software offered by manufacturers is created on contract by the software houses, there is a clear showing that the latter have the technical skills (but not the economic means) to engage in competition.

It was therefore argued, by a software company opposing Section 106, that this provision would end forever the possibility of competitive software development and marketing, that it would render irreparable harm to the software companies and that such a non-competitive situation does not encourage manufacturers to build the most effective software.[35]

It has been stated that since programming requires large investments, without adequate protection, the dissemination of programming will decrease.[36] On the other hand, even if patents are made available for software inventions, the fact that patents are expensive and time consuming to obtain, that they are risky to defend, and unenforceable to all except major concerns because of prohibitive expense of litigation and the extreme difficulty of detecting infringe-

---

[35] *Supra* note 28 (Wessler).

[36] James P. Titus, *Communications of the ACM*, Vol. 10, No. 2 (February 1967), p. 126.

ments, the software companies, which are typically much smaller than manufacturers, would still be at a competitive disadvantage.[37] Under these circumstances, barriers would exist which would discourage the entry of newcomers to the field.[38]

> The software houses are growing in size, number and share of the market. Currently there is a big trend to investment in proprietary packages which can be sold "off the shelf" to many users, with development costs amortized against many customers. User contracts usually include clauses prohibiting disclosure to outsiders, but high costs still invite plagiarism, translation to other languages, and disguising programs. Only the high sense of professionalism and business ethics which exist in the industry lessen the problem of program plagiarism; moreover, extensive publication of new techniques through trade and professional journals and conferences and "user groups" by manufacturers, and academic people who do not profit from keeping their advances from competitors, militates against the likelihood of the industry being stunted by secrecy. The incentive to publish, which patents provide, would eliminate duplicate effort among competitors, remove secrecy from proprietary programs, and encourage the development of programs that can be profitably developed only if (they are) sold more than once.[39]

The author of the previous quotation has also pointed out some of the difficulties for the software houses and the strengthening of the manufacturers' competitive position if patent protection is made available:

> Manufacturers would have significant competitive advantage due to larger research and litigous capabilities and resources. Their complex and expensive programs might better meet stiff tests of innovation than simpler proprietary programs. Manufacturers could tie up enough techniques to make survival of small software firms difficult. Also the traditional evils of monopoly—complacency and high prices—could stifle further developments; large companies might concentrate more on detecting infringers and protecting their patents than on inventing new and more efficient programs.

How would the individual programmer fare if patent protection does or does not become available? One very large computer user, which has made substantial contributions to many aspects of the field, and which might be expected to secure substantial royalty income from its software inventions, has pointed out that program patents would provide a means of public recognition for the programming excellence of individual inventors.[40] This same creative person is as

---

[37] Allen W. Puckett, *Datamation* (November 1967), pp. 55-60.
[38] *Supra* note 36.
[39] *Supra* note 31.
[40] *Supra* note 36.

much an inventor as one who creates an improved eggbeater,[41] and even if his program consisted of only a few machine instructions, it might be so superior to those previously developed as to constitute a "flash of genius."[42] Recognition of the contribution and the tangible rewards that can ensue from patent ownership should not be denied merely because this inventor is operating within a new, and not yet widely appreciated technological arena. Another implication for programmers should also be mentioned: Although there has been a continuous shortage of skilled programmers throughout the short life of the computer industry, the thin resources have been put to less than full use, due to the duplication of effort. Programs have often been developed for new users when, unknown to them, the same programming problem may have already been solved elsewhere. Wider communication of programming knowledge might result if patent protection were available because program developers would be encouraged to sell their inventions as marketable technical information.[43]

Implications (of permitting software patents) for users outside the software and hardware segments have not been widely discussed; only two such comments will be noted here. The American Chemical Society has gone on record as opposed to Section 106 on the ground that it would exclude from patent coverage all of those chemical processes which are automatically controlled.[44] In a similar view, it has been suggested that Section 106 would have the effect of removing from the field of patentable inventions all methods in the field of communications, and, one by one, all other fields, and would cast a cloud of invalidity on previously issued process patents in these fields.[45]

Conclusions

The issues discussed above represent views on what the law and practice are today, as well as on what the law should be. The guidelines published by the Patent Office and the hearings held to elicit comments on the guidelines were clearly aimed at codifying and clarifying the existing law,[46] at least as interpreted by the Patent

---

[41] *Supra* note 30.

[42] Michael I. Rachman, *JPOS*, Vol. 48, No. 4 (April 1966), pp. 275-277.

[43] *Supra* note 32.

[44] *Supra* note 16 at p. 615.

[45] William J. Scherback, *Patent Law Annual* (1967), pp. 195-197.

[46] Guidelines to Examination of Programs (August 16, 1966), 829 O.G. 865-7; Guidelines to Examination of Programs, Transcript of the October 4, 1966, Hearings (Washington, D.C.: Ward and Paul Co.); and *supra* note 32 (n. 7, p. 242).

Office. To an extent, the President's Commission Recommendation IV (3), which has served as a conceptual basis for Section 106, also represents an attempt to codify present practice.

Reasonable, substantive arguments have also been advanced to support the position that software inventions are properly viewed as processes for operating programmable devices, and assuming that the usual standards of novelty and non-obviousness are met, it is difficult to say with any certainty that such inventions should not be patentable. As for the argument that software inventions should be treated as apparatus, the applicability of the doctrine of equivalents (here applied to the widely recognized possibility of constructing either a programmed instruction sequence or a hardware assembly to accomplish any given function) is difficult to deny. In addition, the combination of some hardware features plus some software features recited together in a single claim, would define a fully operative device, whereas each of these separately would seem to be for subcombinations. It is observed in passing, that these are subcombinations which are separately marketable, and that they are useful with other subcombinations; which is to say that Program A is useful with machines A, B, C, et cetera, and machine A may be operated by programs A, B, C, D, et cetera.

As previously noted, those patents which have been alleged to be for software, in our view, at least, are not clear-cut cases, and we must agree that the Patent Office has consistently refused to allow software claims. But by the same token, it does not appear that the existing law has been sufficiently clarified, since, to the best of our knowledge, no clear-cut cases have been adjudicated by the courts. The current law has not been clarified only because the Patent Office position has not yet been sufficiently challenged. The only way that this will take place will be for one or more applicants to present software claims in a programmer-recognized form (flow chart, instruction listing, et cetera), after final rejection (which seems to be certain in view of the announced policy) appeal to the Board of Appeals, and following an adverse decision there, take the case to the CCPA. The expense and effort involved will not be small, but if the protection sought is really worthwhile for the applicant, the effort may be worthwhile. If the principle of patentability under current laws can be established, it will be a question of case by case determination of standards of invention and of acceptable claim formats.

The arguments based on the relative competitive positions of the hardware manufacturers and the software houses are really only

apropos to a discussion of new laws. On balance, it appears, with basic software being offered as part of the package when computing equipment is acquired from manufacturers, that the software houses, and to a lesser extent the users, are at a disadvantage. This fact certainly would deter rather than encourage the development of this most useful art.

If the current law is finally determined not to cover software inventions, Congress should amend the existing statutes by adding a new class of patentable subject matter, rather than by providing a new form of legal protection. The difficulties with copyright protection, the non-applicability of design patents, and the drawbacks in continued use of trade secret protection have been fully aired in the literature as well as in testimony before the Patent Office (*re* the guidelines) and before Congress (*re* bills to revise Title 35). The protection of the inventive concept which patents would provide is sufficient justification for finding a means for including software within the scope of the patent system.

Consideration should be given to find procedures for shortening the prosecution time, and perhaps the term of the patent (as with design patents) because of the short, economically valuable half-life of most software. The definition of what subject matter is to be covered must be worked out very carefully by the Patent Office, the Patent Bar, the software and the hardware companies. Necessarily, court decisions will be the ultimate guidelines of scope.

A related area for determination, one which we suspect lies at the root of many of the problems considered, is that of claim format. Whether a program listing, or a flow chart, or some other form becomes the one to be preferred is now difficult to foresee. There are so many variables and opportunities for equivalence between different programming languages, between versions of the same language intended for use on radically different machines or slightly different configurations of similar machines, and various levels of language to accomplish the same purpose, that it will not be possible to stipulate a single format or language for software claims. The desire to obtain broad claims, together with these equivalence opportunities will provide challenges during prosecution for both the Examiner and the attorney, but the difficulties will not be materially different than in other complex arts, such as computer hardware.

We also urge that the Patent Office invest the required resources to develop mechanized classification and search systems for the software arts. Even if software per se does not become clearly patentable, this

art must be searched to afford a proper presumption of validity for hardware and process patents.

One last comment is in order. The move toward making the various national patent systems of the world compatible with each other promises benefits for inventors, users of technology, and the Patent Offices. That at least some other countries are moving toward issuing software patents (e.g. Australia, Netherlands, United Kingdom) is not, of course, compelling on the U. S. Patent Office. There are already, and there will continue to be, differences in patentable subject matter among the several national systems. However, the U. S. Patent Office might take advantage of classification and search techniques developed by these other countries for the art in question.

AUTHORS' NOTE: *Shortly after the above textual material was written two significant events occurred: (1) The Patent Office published computer programs,*[47] *and (2) the Patent Office announced the initiation of a comprehensive study of the need for protection of new guidelines to the examination of applications for patents on computer programs, encompassing all aspects of this question. Written comments from interested parties were solicited for submission by December 15, 1968.*[48] *Issues brought to light in this study, particularly with respect to implications for various segments of the computing industry, will be reported on subsequently.*

BIBLIOGRAPHY

In addition to the citations in the footnotes, the author has suggested that the following references be brought to the reader's attention:

American Bar Association Journal, Vol. 53 (October 1967), pp. 911 ff.
Antitrust Bulletin, Vol. 6 (1961), pp. 549-558.
Banzhaf, John F. III, *Communications of the ACM* (April 1965), p. 220.
Banzhaf, John F. III, *Proceedings of IFIP Congress 65,* Vol. 2, pp. 533, 534.
Banzhaf, John F. III, *Dickinson Law Review,* Vol. 71, No. 2 (Winter 1967), pp. 240-256.
Boonin, Laurence I., *Proceedings of IFIP Congress 65,* Vol. 2, pp. 534, 535.
Bulletin of the Patent, Trade Mark and Copyright Institute of Canada, Series 7, Vol. 21, pp. 83-101.
Clampett, Harry A., Jr., *Datamation* (December 1967), p. 140.
Columbia Law Review, Vol. 64 (November 1964), pp. 1274-1300.

[47] *Official Gazette* (October 22, 1968), pp. 829-830; and *Federal Register* (October 22, 1968), pp. 15, 609-15, 610.

[48] *Official Gazette* (October 15, 1968), p. 555; and *Federal Register* (October 19, 1968), p. 15, 562.

Commerce Clearing House (June 1966, Ed. Bigelow).
Computer Bulletin, Vol. 8 (March 1965), pp. 146 ff.
Computer Digest (August 1968), pp. 11.
Computers and Automation, Vol. 13 (April 1964), pp. 8 ff.
Computers and Automation, Vol. 17 (May 1968), pp. 11 ff.
Computer World (June 19, 1968), "Antitrust Investigation of Software Is Urged," p. 11.
Computer World (June 19, 1968), "First Patent Is Issued for Software, Full Implications Are Not Yet Known," p. 1.
Computer World (June 26, 1968), "Patent Office Is Ruffled by First Software Patent," p. 3.
Computer World (September 18, 1968), "Software Is Only 2% of All Costs: IBM Exec," p. 2.
Datamation (October 1968), pp. 32-39.
Datamation (June 1966), p. 85.
Davidson, Dr. Leon, *Computers and Automation* (May 1968), pp. 12, 13.
Electronic News (April 29, 1968), p. 46.
Eltgroth, *Patent Law Annual* (1966), pp. 1-8.
Finkelstein, Herman, *Patent Law Annual* (1967), p. 199.
Fortune (August 1968), p. 34.
George Washington University Law Review (May 1967), Vol. 35, pp. 641 ff.
George Washington University Law Review (October 1967), Vol. 36, pp. 95 ff.
Gonda, Edward C., *Proceedings of IFIP Congress 65,* Vol. 2, p. 534.
Hamlin, Kenneth B., *Communications of the ACM,* Vol. 7, No. 10 (October 1964), pp. 581, 582.
Hauptman, Gunter A., *Communications of the ACM,* Vol. 7, No. 10 (October 1964), p. 579.
Hearings before the Subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary, U.S. Senate, Part 1 of 2. (Washington, D.C.: G.P.O. 1968).
IDEA, Vol. 8 Conference Number 1964, pp. 45-50, 176-201.
IDEA, Vol. 11 Conference Number 1967, pp. 199-209.
Jacobs, Morton C., *Proceedings of IFIP Congress 65,* Vol. 2, p. 533.
Jacobs, Morton C., *Communications of the ACM,* Vol. 7, No. 10 (October 1964), pp. 583, 584.
Jacobs, *JPOS,* Vol. 27 (January 1965), pp. 6-14.
Jones, *Computers and Automation,* Vol. 17 (March 1968), pp. 11 ff.
JPOS, Vol. 25 (February 1963), pp. 125 ff.
JPOS, Vol. 29 (March 1967), pp. 139 ff., 149 ff.
JPOS, Vol. 29 (May 1967), pp. 323 ff., 372 ff.
Kates, Joseph P., *Communications of the ACM,* Vol. 7, No. 10 (October 1964), p. 578.
Katona, *JPOS,* Vol. 27 (December 1965), pp. 955-979.
McOustra, C.J.C., *Proceedings of IFIP Congress 65,* Vol. 2, pp. 535, 536.
McOustra, C.J.C., *The Computer Bulletin* (December 1964), pp. 96, 97.
McOustra, C.J.C., *Proceedings of IFIP Congress 65,* Vol. 2, pp. 532-536.
MULL (now *Jurimetrics*) (June 1965), at pp. 53-55.
NAA Bulletin, Vol. 45 (February 1964), pp. 21-26.
New York Times (October 23, 1968), "Computer Software Unpatentable," pp. 59 and 65.
New York University Law Review, Vol. 38 (November 1965), pp. 891-916.
Nimtz, Robert O., *Patent Law Annual* (1967), pp. 191-193.
Patent Reform Act of 1967, The, (Washington, D.C.: G.P.O., February 21, 1967).
Proceedings of the Computers-In-Law Institute's First Annual Conference (October

22 and 23, 1968), "The Law of Software," The National Law Center of The George Washington University, Washington, D.C.
Puckett, Allen W., *Computer Digest* (May 1968), pp. 5-7.
Reddig, William, Jr., *The Evening Star* (Washington D.C., December 7, 1966), pp. 6-17.
Semling, Harold V., *Modern Data Systems* (April 1968), p. 18.
Senate 1042, 90th Cong., printed for use of the Senate Committee on the Judiciary.
Wessel, Milton R., *Proceedings of IFIP Congress 65,* Vol. 2, pp. 532, 533.
Wessel, *Harvard Business Review,* Vol. 43 (March 1965), pp. 97-106.
Wessler, John, *Electronic News* (November 20, 1967), p. 36.

FORUM

Although the primary purpose of *IDEA* is to communicate the research work of the Institute, it also serves as an educational vehicle for the exchange of informed opinion. The positions taken by the authors of papers and notes in this section are not necessarily those of the Institute. It is hoped that the material published in this section will stimulate researchers to undertake further study of the issues.

Westinghouse Electric Corporation
Patent Department
Pittsburgh, Pa. 15235
August 19, 1968

The PTC Research Institute
The George Washington University
Washington, D.C. 20006

Gentlemen:

The article "Use Limitations in Patent Licenses" by Joseph Gray Jackson and Edward Lovett Jackson in the Spring 1968 issue of *IDEA* was interesting and helpful. Several things have combined to suggest an expanded discussion.

This letter is intended as a supplemental comment to the article of the brothers Jackson and deals specifically with so-called field-of-use licensing wherein the licensee is licensed to practice the invention in less than all possible fields of utility. Most attorneys have, for years, issued licenses of this sort without any intention that the license should imply an agreement that the licensee would *not* infringe or otherwise make, use or sell *outside* the licensed field or fields.

Within the last few years, doubts concerning the legality of field-of-use licensing have been raised. Various members of the Antitrust Division of the Department of Justice have indicated that field-of-use licensing is suspect and carries with it an implied negative as mentioned above. Among other things, it is argued that the possibility of facing suit for infringement or activity outside the licensed field effectively constitutes a market restraint.

Further, the Vermont Supreme Court seems to agree that there is an implied covenant not to practice outside the scope of the license. See decisions of that court in the case of *Shaw et al.* v. *E. I. duPont de*

Nemours & Company 152 *USPQ* 364 and 152 *USPQ* 723. It appears that the plaintiff Shaw granted an exclusive license to Polymers to make, vend and sell under his patent filaments having a cross sectional diameter greater than five mils. Another license was granted DuPont to manufacture, use and sell filaments having maximum cross sectional dimensions of less than five mils. DuPont manufactured and sold filaments having dimensions greater than the upper limit recited in its license. The patent owner sued, not for infringement, but for breach of contract. The court, in its opinion, said that the "underlying principle is that there is an implied covenant that neither party shall do anything to injure or destroy the rights of the other party to receive the benefits of the agreement." The court then found that such implied covenants have had application to license agreements in the copyright field and that corollary application lies in the field of patent rights. Thus, the case holds that a field-of-use license is impliedly a restrictive limitation going beyond a mere definition of the boundary of the license.

Finally, the President's Commission recognized this problem by including in Recommendation XXII the language

> The licensable nature of the rights granted by a patent should be clarified by specifically stating in the patent statute that: (1) applications for patents, patents, or any interest therein may be licensed in the whole or in any specified part, of the field of use to which the subject matter of the claims of the patent are directly applicable. . . .

The recommendation has not been included in any of the bills introduced by the Administration or by Senator McClellan because, it is understood, of opposition from the Department of Justice.

In view of the foregoing background, it may be useful to explain the utility, practicability, and reasonableness of straightforward field-of-use licensing. In this sense, I mean a grant to make, use or sell in a specified field without any restrictions as, for example, a license to make, use and sell transformers under specified patents not exceeding a stated rating. Note that the licensee contracts for a right to practice the invention in a specified area but does not agree that he will refrain from practicing the invention in other fields. Thus, a distinction is made between the grant of a license to a particular field or fields and an agreement by the licensee that he will make, use or sell *only* in the specified field or fields.

(1) There cannot be a meeting of the minds unless all relevant factors are known and understood. These include:

(a) Anticipated or existing volume of sales

(b) Profit margins
(c) The level of fair royalty
(d) The availability of substitutes
(e) The degree of utility
(f) The extent of demand
(g) Scope of invention (generic vs. species or improvement as well as product vs. component)
(h) Expected saving
(i) Necessity for further technical development
(j) Necessity for market development
(k) Necessity for further investment

Factors such as the above may be different for different applications of any particular invention.

(2) Even when a number of different applications of an invention are apparent, the same terms and conditions are not necessarily equally appropriate or present in the situation. Moreover, in many cases all possible fields of use are not foreseeable.

(a) The royalty base may be different. It is not possible to define just what royalty is to be paid on until one knows what the device is.

(b) If royalty is a fixed sum per device (rather than percentage), the fixed sum may well be different for different devices or fields of use.

(c) If there is more than one patent licensed, the list of patents may not include all of those necessary for a different device and may include some which could not be used in the other field. That is, one field may require patents A, B and C; another field, patents A, B, D and E, and another field, patent A only. The agreement should not force on the licensee patents that he does not want.

(d) An agreement in one field may include manufacturing information, but the licensor may not have information to give in another field.

(e) The royalty might be a percentage of selling price in one field where the patented device is sold per se, but so many cents per device or on some other basis in another field where the patented device is sold only in combination with something else not covered by the patent.

(3) It is not always to licensee's advantage to take the broadest possible license. Thus, the licensee may

(a) Avoid acknowledgment of validity in some areas (limit license to scope and term).

(b) Agree that one design is a clear infringement but another may not be.

(c) Limit internal approvals and negotiations to only a particular division of a multi-division company.

(d) Want to be free to negotiate each situation.

(e) Want to commit himself only for a particular product or product line and wants to eliminate any commitment on speculative areas.

(f) Be able to get a lower royalty rate in a field where the licensor is not using the patent since it will not reduce the licensor's business.

(g) Be able to get a lower paid-up lump sum for a license for a limited field, whereas a much larger lump sum would be required for all fields, and licensee might not be able to pay the larger sum for all fields and he may have no use for the rights in the other fields.

(h) Be able to get, for a limited license, a low annual ceiling or a low ceiling on total royalty to be paid, but the ceilings for a license for all fields would be so high the licensee would never reach the ceiling to get any benefit from it if he operates in only one field.

(i) Be able to get a sliding scale reduction in royalty rate, i.e., 5% first $100,000, 4% next $100,000, etc., with small brackets for a limited field, but the brackets for all fields would be so large as to give the licensee no benefit.

(j) Want separate licenses for each field so that he may terminate separately. He may want to design around the patent in one field and then cancel, but not be able to do so in another field. If there is a minimum royalty in each agreement, he can save the minimum by cancelling in the field where he stops selling.

(k) Want separate licenses for each field so that he may assign the licenses with his business in each field, whereas one license is indivisible.

(4) It is not always to the advantage of licensor to grant a general license.

(a) In view of the many uncertainties, it is reasonable to negotiate each situation on its own facts.

(b) Patent may apply to entirely different products and/or industries and agreements in each could appropriately have en-

tirely different terms due to unique problems and differences in structures.

(5) A patent owner is not required to grant licenses, and frequently does not license single-use patents; however, the right to license fields of use outside his own field encourages the patent owner to make the patented invention available to a greater segment of the public through field-of-use licenses.

(1) Simple field-of-use grants limit only the scope of the license and not the area of operation by the licensee.

(2) Simple field-of-use grants are reasonable and advantageous to both licensor and licensee.

(3) If such grants are used to violate the antitrust laws, we are participating in a different situation.

Very truly yours,

s/T. L. Bowes
General Patent Counsel

STUDENT PAPERS

By making available student papers, students will receive an incentive and our readers will appreciate the evidence of scholarly development in the fields of interest. These papers are carefully reviewed by the Editorial Committee and other specialists, and helpful suggestions are made to the students as part of the educational function of *IDEA*. The Research Institute invites educational and research institutions to submit informative student manuscripts on the patent, trademark, copyright, and related systems.

Copyright Protection for Motion Pictures: Limited or Perpetual?*

PETER F. NOLAN

SUMMARY

EXAMINING THE EXISTING CASE LAW relating to the concept of publication in copyright law, the author finds that the vast majority of motion pictures produced in this country can be granted virtually perpetual copyright protection under state common law. The author concludes that this is contrary to the Patent-Copyright Clause in the United States Constitution, and he suggests that this anomaly be clearly overruled by Congress in the Revision Bill.

* This paper was chosen to represent Georgetown University in the 1968 Patent Office Society Student Award Competition. It has also been awarded Georgetown University Law Center's first prize in the 1968 Nathan Burkan Memorial Copyright Competition which is sponsored annually by the American Society of Composers, Authors & Publishers. The author is an Associate with the firm of Woodson, Pattishall & McAuliffe, Washington, D.C.

INTRODUCTION

THE CONCEPT OF PUBLICATION, while critical to the protection of literary property in this country, is one of the most complex areas in United States copyright law. Publication, as a copyright term, developed from the historical Anglo-American dichotomy between common law and statutory copyright (Generally, when a work is first published, the common law protection of the work is lost[1] and, if certain requirements are satisfied, statutory copyright is secured[2]). But primarily because the statutory language concerning publication is unclear, the case law on this issue is replete with inconsistencies and with decisions in direct conflict with each other.[3] And it will be the purpose of this paper, applying this confusing body of case law, to determine if or when there is, in the copyright sense, a publication of a motion picture.[4]

BACKGROUND

The Copyright Act does not directly define the term "publication," but Section 26 of the Act does refer to the "date of publication" as "the earliest date when copies of the first authorized edition were placed on sale, sold, or publicly distributed. . . . "[5] As a result, the

---

[1] Wheaton v. Peters, 33 U.S. (8 Pet.) 591 (1834); *accord,* Universal Film Mfg. Co. v. Copperman, 218 F. 577 (2d. Cir.), *cert. denied,* 235 U.S. 704 (1914). *But cf.* Capital Records, Inc. v. Mercury Records Corp., 221 F. 2d 657 (2d Cir. 1955).

[2] 17 U.S.C. § 10 (1947).

[3] *Compare, e.g.,* Pierce & Bushnell Mfg. Co. v. Werckmeister, 72 F. 54 (1st Cir. 1896) (exhibition of a painting in a public art gallery held to be publication) *with* Werckmeister v. American Lithographing Co., 134 F. 321 (2d Cir. 1904) (exhibition of a painting in a public art gallery held not to be a publication).

[4] This paper will take no position on whether the sound track of a particular film constitutes an integral part of the motion picture so that the sound track would be covered by the copyright in the motion picture. *But see* Blanc v. Lantz, 83 *USPQ* 137 (Cal. Super. Ct. 1949). *See generally* M. Nimmer, "Copyright Publication," *Columbia Law Review,* Vol. 56 (1956), pp. 185, 186.

[5] 17 U.S.C. § 26 (1947). The drafters of the 1909 Copyright Act never intended the definition of the date of publication to be an all inclusive description of how publication itself could take place. There was a fear among the drafters that new methods of exploitation of writings, especially works not reproduced for sale, would be developed which would not be considered acts of publication because such methods did not come within the requirements of a specific definition of publication. It was, therefore, resolved that no definition of publication would be present in the Act. *Arguments before the Committees on Patents on the Bills S. 6330 and H.R. 19853,* 59th Cong., 2d Sess., p. 71. (June 6, 7, 8 and 9, 1906); *accord,* Cardinal Film Corp. v. Beck, 248 F. 368 (S.D.N.Y. 1918) (L. Hand, J.).

courts, while staying within the framework of the definition stated in Section 26, have generally defined "publication" as:

> . . . when by the consent of the copyright owner the original or tangible copies of a work are sold, leased, loaned, or given away, or otherwise made available to the general public, or when an authorized offer is made to dispose of the work in any such manner even if a sale or other such disposition does not in fact occur.[6]

However, when courts are faced with specific cases having parties with conflicting equities, the courts are reluctant to apply such an abstract definition of publication. An examination of the cases suggests that the courts will require considerably more open dissemination of the work where common law protection is sought than where the plaintiff is claiming sufficient publication to maintain an action based on the federal statute.[7]

To rationalize the difference in burdens of proof, the courts have evolved a distinction between "general publication" and "limited publication."[8] A "limited publication" is one "which communicates the contents of a manuscript to a definitely selected group and for a limited purpose, and without the right of diffusion, reproduction, distribution, or sale. . . ."[9] Thus, if an author distributes his work (1) for a limited purpose and (2) to a limited group of persons, only a "limited publication" would be held to have taken place. However, in the absence of either a limited purpose or a limited group of persons, the courts will, or at least theoretically should, hold that there has been a "general publication" and that common law protection is thereby divested.

As the result of the above distinctions made by the courts, cases decided under the statutory requirement of publication are not reliable precedents on which to determine whether a forfeiture of common

---

See also W. Strauss, *Protection of Unpublished Works—Study No. 29,* Studies prepared for the Subcommittee on Patents, Trademarks and Copyrights of the Committee on the Judiciary Pursuant to S. Res. 240, United States Senate, 86th Cong., 2d Sess., pp. 8-9. (Washington, D.C.: G.P.O. 1961.)

[6] M. Nimmer, "Copyright Publication," *Columbia Law Review,* Vol. 56 (1956), pp. 185, 187, (emphasis and footnotes omitted).

[7] American Visuals Corporation v. Holland, 239 F. 2d 740, 743 (2d Cir. 1956) (dictum). *See also* R. DeWolf, *An Outline of Copyright Law* (1925), p. 32.

[8] The distinction between limited and general publication does have some basis in the legislative history of the 1909 Copyright Act. *See Arguments before the Committee on Patents on the Bills S. 6330 and H.R. 19853,* 59th Cong., 2d Sess. (December 7, 8, 10 and 11, 1906), p. 101-2.

[9] White v. Kimmell, 193 F. 2d 744, 746 (9th Cir.), *cert. denied,* 343 U.S. 957 (1952). *See generally* Schlattman, "The Doctrine of Limited Publication in the Law of Literary Property Compared with the Doctrine of Experimental Use in the Law of Patents," *Copyright Law Symposium (ASCAP),* Vol. 5 (1954), p. 37.

law rights has occurred.[10] Therefore, this paper will apply only divestiture cases where the publication of a work is alleged to have divested common law rights, and alternatively, will apply only investiture cases to situations where federal statutory protection is contested.

Motion Picture Distribution Trade Practices

Before applying the above concepts to the distribution of motion pictures,[11] a description of those practices is in order.

A theatrical motion picture is normally produced (photographed and manufactured) by an independent producing company and then distributed by yet another company, usually one of the major distributors. This is certainly not the exclusive arrangement for the production of motion pictures, but it is presently being used more frequently than any other method. Prior to 1949 the vast majority of motion pictures in the United States were produced by one of seven major companies,[12] but following an antitrust decree in that year a trend toward independent production developed.[13] This earlier method of production is now only infrequently used.[14]

---

[10] Continental Casualty Company v. Beardsley, 253 F. 2d 702, 707 (2d Cir.), *cert. denied,* 358 U.S. 816 (1958).

[11] A motion picture is defined as "a series of pictures (as photographs taken with a special camera) presented to the eye in very rapid succession with some or all of the objects in the scene represented in successive positions slightly changed so as to produce because of the persistence of vision the optical effect of a continuous picture in which the objects move." *Merriam-Webster Third New International Dictionary* (3d ed. 1961), p. 1475.

[12] Prior to 1949 five of the major companies not only had extensive distribution systems, but also possessed their own production units and theatre chains (Paramount Pictures, Inc.; Loews, Inc.; Radio-Keith-Orpheum Corp.; Warner Bros. Pictures, Inc.; and Twentieth Century-Fox Corp.). Two of the major producing companies did not own a distribution system, but did possess theatre chains (Columbia Pictures Corp. and Universal Pictures Company, Inc.). An eighth major company, United Artists Corp., was exclusively a distributor and operated neither a production unit nor a theatre chain.

[13] The antitrust suit was brought against the eight major motion picture companies (*Id.*) as the result of which each major producer was compelled to divest itself of its chain of theatres. United States v. Paramount Pictures, Inc., 334 U.S. 131 (1948), *remanded* 85 F. Supp. 881 (S.D.N.Y. 1949). No longer able to find easy access into the theatres for exhibition of their pictures, the major producers found it unprofitable to maintain their vast studio facilities. They thereupon began either to sell these facilities outright or to lease them out to various independent producers. As a result, the independent producer soon became the dominant source of motion pictures. *See generally,* M. Conant, *Antitrust in the Motion Picture Industry* (1960).

[14] There are basically two other methods by which motion picture producers in the United States acquire rights to films. One method is to co-produce a motion

Once the motion picture is produced, prints of the film are transferred to the distributor who, in turn, sends approximately three to four hundred copies of the motion picture to his branch offices. The branch offices of each film distributor are known as "exchanges," and it is at these exchanges that trade screenings are given and the final contracts with the exhibitors are negotiated.[15] However, the national office of each film distributor determines the date when a particular film will be available on a nationwide basis to the exhibitors.[16]

The actual shipping and handling of the prints are generally performed by local "transfer companies." One transfer company may perform these services for one or more distributors in a particular region. The transfer companies daily inspect each film for the branch offices and ship the prints from one theatre to another. However, all the leasing arrangements are negotiated with the exhibitors by the personnel of the distributor in the branch office and not by the transfer companies.

---

picture with another, usually a foreign producer. Each producer contributes part of the necessary money, and the rights of distribution are then divided up. Another method is for a producer in the United States to purchase distribution rights of an already completed film. Interview with Kenneth A. Clark, Executive Vice-President of the Motion Picture Association of America, in Washington, D. C., February 6, 1968.

[15] There are normally 32 "exchanges" (branch offices) for each film distributor. Each film exchange has no affiliation with any other film distributor and is a wholly owned office of the national film distributor. The film distributors have generally split up their exchange regions exactly alike and have exchanges in the same city—often on the same avenue. Testimony of Alfred R. Taylor, Paramount Film Distributing Corp., Los Angeles, Calif. *Hearings on Motion Picture Trade Practices Before a Subcommittee of the Select Committee on Small Business,* United States Senate, 83d Cong., 1st Sess. (1953), pp. 258-59.

[16] Some pictures are released ahead of the national availability date ("prerelease"). Pictures regarded by the distributor as having exceptional merit or involving unusually high production costs are licensed for an exclusive run in a limited number of communities. When this restricted run is finished, the picture is withdrawn for an indefinite period. After a lapse of about two or three months the distributor makes the picture available to exhibitors on a general release basis, the customary method of distributing motion pictures.

In addition to this "prerelease" practice, a company may initially exhibit a limited number of prints of a film by means of a "sneak preview." (This is normally done only by companies which possess both production and distribution divisions.) The purpose of the "sneak preview" is to determine audience reaction to particular scenes in the motion picture which has theretofore not been finally edited. "Sneak previews" are presently used only on rare occasions. *Hearings on Motion Picture Distribution Practices (1956) Before a Subcommittee of the Select Committee on Small Business,* United States Senate, 84th Cong., 2d Sess. (1956), pp. 27-28; Interview with Kenneth A. Clark, Executive Vice-President of the Motion Picture Association of America, in Washington, D. C., February 6, 1968.

The 300 to 400 prints of each film are distributed to between 3000 to 12,000 exhibitors for public showings in theatres. In addition, copies of the motion pictures are distributed on a non-fee basis to various producers, directors and movie stars, and on a fee basis to the Army-Air Force Motion Picture Service, the Navy Motion Picture Service, the Veterans' Administration, and the Red Cross.

The distributor never sells prints of a film to a theatrical exhibitor, but instead grants to the exhibitors a performing license under the copyright in the motion picture, a license which is strictly limited as to the place of performance and as to the dates upon which the film may be exhibited. A positive print of the motion picture is loaned to the licensee-exhibitor, to be cared for properly and returned immediately after the last licensed performance.[17]

After the theatrical distribution of a motion picture has been completed, the film normally becomes available for exhibition over television to the television networks and/or independent television stations. Sometime thereafter, prints of the film are often distributed to numerous local 16mm film libraries with which the distributor normally makes a virtually perpetual rental agreement. These film libraries, in turn, lease copies of the motion picture to non-theatrical private organizations for showing.[18]

Films made for television have a different distribution procedure. For films shown by the networks four prints of the motion picture are normally procured and transmission of the motion picture by coaxial cable takes place at only two places, New York and Los Angeles. Each transmission center normally has two copies of the film. Only infrequently do the networks find it necessary to ship copies of the film to wholly owned or affiliated television stations (there are approximately 150 stations affiliated with each of the three major networks) and this occurs only when there is a necessity for a delayed showing.

Distribution of television films to independent television stations, that is, syndication, is done in approximately the same manner as distribution of prints to theatre exhibitors. Almost all prints are leased to these television stations for particular showings.

Copies of motion pictures made primarily for educational and other related purposes are either leased or actually sold by the producers or distributors to the exhibitors. This differs from distribution of prints

---

[17] *Hearings Before Subcommittee No. 3 of the Committee on the Judiciary on H.R. 4347, H.R. 5680, H.R. 6831 and H.R. 6835,* 89th Cong., 1st Sess. (1966), pp. 990, 1000-1.

[18] Interview with Sidney Schrieber, General Counsel of the Motion Picture Association of America, in Washington, D. C., March 7. 1968.

for theatrical or television exhibition, which is almost exclusively done under a lease arrangement.[19]

Publication As Applied To Motion Picture Distribution

For purposes of analysis, this paper will discuss the three major steps in the motion picture distribution process (production, distribution and exhibition) and attempt to determine at what point, if any, a divestive or an investive publication of a motion picture occurs. Special emphasis will be placed on the different methods used to distribute copies of a film.

The actual production of a motion picture is clearly not a publication for either investiture or divestiture purposes, since copies of the motion picture never transfer possession.[20] Also, because the courts have mechanically stated that public performance of a writing is not an abandonment of common law protection,[21] no divestive publication has been deemed to occur upon the screening of a motion picture in a public theatre[22] or over television.[23] Presumably, therefore, the screening of a motion picture either in a public motion picture theatre or over television would not invest statutory protection.

Under circumstances mentioned above, prints of certain types of

---

[19] Joint Interview with Ronald Kaiser, Attorney for Columbia Broadcasting System; Harry R. Olssen, Attorney for American Broadcasting Company; and Myron Roth, Attorney for National Broadcasting Company, in New York City, March 8, 1968.

[20] Professor Nimmer suggests that a *sine qua non* of publication is the acquisition by members of the public of a possessory interest in tangible copies of the literary work. M. Nimmer, "Copyright Publication," *Columbia Law Review,* Vol. 56 (1956); pp. 185, 197; *accord,* King v. Mister Maestro, Inc., 224 F. Supp. 101, 107 (S.D.N.Y. 1963).

[21] Ferris v. Frohman, 223 U.S. 424, 435 (1912); *accord,* Waring v. Dunlea, 26 F. Supp. 338, 340 (E.D.N.C. 1939); French v. Maguire, 55 *Howard Practice,* 471, 479 (Sup. Ct. 1878). *But see* Selvin, "Should Performance Dedicate?," *California Law Review,* Vol. 42 (1940), p. 40. (Mr. Selvin, while advocating that public performance should dedicate a work to the public domain, admits that this is not the present state of the law.)

[22] Metro-Goldwyn-Mayer Distributing Corp. v. Wyatt, 21 *C.O. Bull.* 203 (D., Md. 1932); *accord,* DeMille Co. v. Casey, 121 Misc. 78, 201 N.Y.S. 20 (Sup. Ct. 1923).

[23] *See* King v. Mister Maestro, Inc., 224 F. Supp. 101 (S.D.N.Y. 1963) (giving a speech over national television held not to be a divestive publication); Columbia Broadcasting System, Inc. v. Documentaries Unlimited, Inc. 42 Misc. 2d 723, 727, 248 N.Y.S. 2d 809, 812-13 (Sup. Ct. 1964) (dictum). *See also* Uproar v. National Broadcasting Co., 8 F. Supp. 358, 362 (D. Mass. 1934), *aff'd and modified,* 81 F. 2d 373 (1st Cir.), *cert. denied,* 298 U.S. 670 (1936) (reading text over the radio held not to constitute a divestive publication).

motion pictures (usually educational) are sold outright. And a sale of but one print of a motion picture, even if only a "fanciful" sale, will invest statutory protection.[24] Additionally, the sale of prints of a motion picture will constitute a divestive publication, resulting in the loss of common law protection.[25] Probably, even the "exposure" of prints of a motion picture for sale will constitute a divestive publication.[26]

The deposit of two copies of a motion picture at the Copyright Office, without any further distribution, is not considered an act of publication for either investiture[27] or divestiture[28] purposes.

However, by far the most extensive method used to distribute a motion picture is to lease copies of the film to exhibitors. To determine whether such a distribution of prints is a publication or not shall constitute the major focus of the remainder of this paper.

For investiture purposes, publication of a motion picture takes place when prints of the film are distributed to the branch offices of the distributor under a lease or similar arrangement.[29]

However, it has been held that there is no divestive publication of a motion picture if the distribution of prints is made on a non-commercial license basis. In *Patterson* v. *Century Productions, Inc.*[30] the plaintiff had several copies of his motion picture made and shown without charge to some of his employees and their families. In addition, the plaintiff arranged through the Y.M.C.A. to have copies of

---

[24] Stern v. Jerome H. Remick & Co., 175 F. 282 (S.D.N.Y. 1910); *see* Joe Mittenthal, Inc. v. Irving Berlin, Inc., 291 F. 714 (S.D.N.Y. 1923). *See also* Atlantic Monthly Co. v. Post Publishing Co., 27 F. 2d 556 (D. Mass. 1928); H. Howell, *The Copyright Law* 64 (3d ed. 1952).

[25] Universal Film Mfg. Co. v. Copperman, 212 F. 301 (S.D.N.Y.), *aff'd,* 218 F. 577 (2d Cir.), *cert. denied,* 235 U.S. 704 (1914); *see* Larrowe-Loisette v. O'Laughlin, 88 F. 896 (S.D.N.Y. 1898); Parton v. Prang, 18 F. Cas. 1273 (C.C. Mass. 1872).

[26] *See* Varconi v. Unity Television Corp., 11 Misc. 2d 191, 173 N.Y.S. 2d 201 (Sup. Ct. 1958) (lease of motion picture rights of an underlying work held to be so broad as to expose those rights for sale and thereby to publish that underlying work).

[27] American Visuals Corp. v. Holland, 239 F. 2d 740 (2d Cir. 1956) (dictum); *see* 17 U.S.C. § 13 (1956). *Contra,* Cardinal Film Corp. v. Beck, 248 F. 368 (S.D. N.Y. 1918). *See generally* M. Nimmer, *Nimmer on Copyright* 214 (1967).

[28] *See* Heim v. Universal Pictures Co., Inc., 154 F. 2d 480, 486 (2d Cir. 1946) (sheet music); Joe Mittenthal, Inc. v. Irving Berlin, Inc., 291 F. 714, 715 (S.D.N.Y. 1923) (scenerio). *See also* Edgar H. Wood Associates, Inc. v. Skene, 347 Mass. 351, 197 N.E. 2d 886 (1964).

[29] *See* Ladd v. Oxnard, 75 F. 703 (C.C.D. Mass. 1896) (leasing of books to 179 subscribers with restrictions as to further use held to be a publication investing statutory copyright).

[30] 93 F. 2d 489 (2d Cir. 1937), *cert. denied,* 303 U.S. 655 (1938).

his motion picture shown to many religious, educational, and social organizations. But the film was to be shown to these organizations only upon the express restriction that no charge should be made to the exhibitors of the film, except the actual cost of transportation, and that no charge should be made by the exhibitors to the people observing the screenings of the film. Although through this Y.M.C.A. arrangement thousands saw the film, the court, placing special emphasis on the non-commercial nature of the distribution, held that the motion picture was not published.

> This motion picture was not distributed except for exhibition in the strictly limited non-commercial way above described. As the distribution was limited to exhibition of the picture without charge, no one was given the right to use the copies sent out for any other purpose whatsoever. The positive films were merely loaned for that purpose which did not permit copying. There was, therefore, no publication before the registration under section [12] or before this suit was brought.[31]

There is more difficulty in determining whether or not there is a divestive publication when the motion picture is distributed under a leasing arrangement which is commercial in nature. The Copyright Bar generally takes the position that the commercial leasing of copies of a motion picture does constitute a divestive publication.[32] However, any conclusion made on this issue must necessarily be based on only a meager amount of case law.

In *O'Neill* v. *General Film Co.*[33] plaintiff sued for infringement of his alleged common law copyright in the book, *Count of Monte Cristo.* The defendant alleged that the plaintiff had published his work through the commercial distribution of a motion picture based on plaintiff's work and that, therefore, the state court had no jurisdiction to grant any relief. The court agreed that if the work had been published, the state court would have no jurisdiction. But the court also stated that the work was:

> released for distribution and circulation among exhibitors and motion picture theatres on the 1st of November, 1912; that with the

---

[31] *Id.* at 492.

[32] R. DeWolf, *An Outline of Copyright Law* 29 (1925); F. Skone James, *Copinger and Skone James on the Law of Copyright Law* 66 (3d ed. 1952); A. Latman, *Howell's Copyright Law* 64 (4th ed. 1962); M. Nimmer, "Copyright Publication," *Columbia Law Review,* Vol. 56 (1956), pp. 185, 197-98. *Contra,* M. Aronson, "The Development of Motion Picture Copyright," *Copyright Law Symposium* (ASCAP), Vol. 3 (1940), pp. 339-353; S. Rothenberg, *Copyright and Public Performance of Music* 16 (1954) (distinguishing the *Patterson* case as only dictum when applied to the commercial distribution of a film).

[33] 171 App. Div. 854, 157 N.Y.S. 1028 (1916).

> consent of the plaintiff said company [Famous Players' Film Co.] secured copyright in said films . . . on the 10th day of December, 1912. . . .
>
> By these steps taken by plaintiff and by the Famous Players' Company . . . it is quite clear, I think, that the plaintiff parted with any common law motion picture rights he had in the play, to the extent, at least, represented by the motion pictures thus taken and copyrighted. . . .[34]

The court granted relief for the plaintiff up to the time he allegedly secured federal copyright protection[35] on December 10, 1912.[36] By granting this relief the court implicitly held that the "distribution and circulation among exhibitors and motion picture theatres" which took place on the 1st of November, 1912 did not divest plaintiff's common law rights to his book, and that, therefore, no divestive publication took place at that time; otherwise, the court could not have granted relief based upon common law protection for the period of time between the 1st of November and the 10th of December.[37]

In the second case involving a divestive publication of a motion picture, *Blanc* v. *Lantz*,[38] the plaintiff sought damages for the alleged infringement of his common law rights to a musical laugh on the sound tracks of Woody Woodpecker cartoon films. The defendants contended that the common law rights to plaintiff's musical laugh in the cartoons had been divested by the publication of the cartoon films. The defendants averred that the publication had taken place when the films were commercially distributed to theatres throughout the world. Distinguishing the *Patterson*[39] decision on the grounds that that case involved a non-commercial distribution, the California Superior Court granted the defendant's motion for judgment on the pleadings and said:

---

[34] *Id.* at 866, 157 N.Y.S. at 1037-38 (1916).

[35] This court apparently based its conclusion on the incorrect assumption that investive publication took place at the time of the deposit of two copies of a motion picture with the Copyright Office. At the time of this decision there was some authority for this assumption. *See* Stern v. Jerome H. Remick & Co., 175 F. 282 (S.D.N.Y. 1910) (L. Hand, J.). Subsequently, the Stern case was clarified by Judge Hand to stand for the proposition that deposit plus a "fanciful" sale constituted investive publication. Joe Mittenthal, Inc. v. Irving Berlin, Inc., 291 F. 714, 715 (S.D.N.Y. 1923) (L. Hand, J.).

[36] The Application for Copyright Registration (LP 188-1912) states that the date of publication of the film "Count of Monte Cristo" occurred on December 10, 1912.

[37] O'Neill v. General Film Co., 171 App. Div. 854, 869, 157 N.Y.S. 1028, 1040 (1916).

[38] 83 *USPQ* 137 (Cal. Super. Ct. 1949).

[39] Patterson v. Century Productions, Inc., 93 F. 2d 489 (2d Cir. 1937), *cert. denied*, 303 U.S. 655 (1938).

> I am unable to concur in plaintiff's contention that the distribution of the Woody Woodpecker cartoons at most amounted to a "limited" as distinguished from a "general" publication. The distribution and exhibition in commercial theatres throughout the world in my opinion constitutes so general a publication of the contents of the film and its sound track as to result in the loss of the common law copyright. The fact that the copies of the film were leased rather than sold does not prevent the distribution from constituting a "publication" resulting in the termination of the common law right.[40]

However, the *Blanc* case has been distinguished by commentators[41] on the grounds that the court's decision was based on a subsequently repealed California Statute which stated:

> If the owner of a product of the mind intentionally *makes it public,* a copy or reproduction may be made public by any person, without responsibility to the owner, so far as this state is concerned.[42]

By the words, "makes it public," the statute appears to have included the public performance of a writing in California's definition of "publication," a definition broader than that existing at common law.[43] This position is supported by the *Blanc* court's use of the words, "distribution *and exhibition,*"[44] in finding that the motion picture in question had been published. Since this statutory definition of publication is broader than the common law definition, the *Blanc* case is said to have little precedent for cases not coming under the statute.

However, it is submitted that the *Blanc* decision stands for more than a court merely construing a repealed California statute. In the written opinion the court referred to the basic arguments that could have been made by each party to the suit. Defendant could have urged, the court stated, that to allow the proprietor to exhibit his motion picture without a divestiture of common law protection, no matter how wide-spread and commercially his performances may have extended, would be to allow an exploitation of copyrightable material

---

[40] Blanc v. Lantz, *supra* note 38, at 142.

[41] B. Kaplan, "Publication in Copyright Law: The Question of Phonograph Records," *University of Pennsylvania Law Review,* Vol. 103 (1955), p. 469, at 486n. 75; M. Nimmer, *Nimmer on Copyright* 217n. 169 (1967); W. Strauss, *Protection of Unpublished Works Study No. 29.* Studies Prepared for the Subcommittee on Patents, Trademarks and Copyrights of the Committee on the Judiciary Pursuant to S. Res. 240. United States Senate, 86th Cong., 2d Sess., p. 11. (Washington, D. C.: G.P.O., 1961.)

[42] California Civil Code (Ann.) § 983 (1954), *formerly* California Civil Code § 983 (1872) (emphasis added).

[43] Cases cited notes 22 and 23 *supra.*

[44] Blanc v. Lantz, *supra* note 40 (emphasis added).

by way of a perpetual monopoly inconsistent with the public good and the United States Constitution. Therefore, defendant could have urged that a public performance under the statute was a publication. The court went on and stated that the plaintiff could have urged that publication requires a distribution of some tangible "copy" and that performance of copyrightable material does not fall within this requirement. Therefore, plaintiff could have urged that his work was not published by its exhibition in commercial theatres.[45]

The court, while conditionally agreeing with the argument that public performance did not dedicate the cartoon film to the public domain either under the statute or under common law, held that the distribution and exhibition of copies of a motion picture was a publication, divesting common law rights.

> But even if plaintiff's performances have not resulted in a legal dedication..., I nevertheless am of the opinion that the recordation of that laugh on a motion picture sound track for the purpose of distribution for reproduction in commercial theatres throughout the world *and the actual distribution of such prints and playing of the sound tracks in such theatres* constituted a "publication" of plaintiff's composition.[46]

Not only did the court not rely on the broad language of the statute to reach its holding, but the court supported its conclusion only on cases construing the common law definition of publication, and not on the statute's wording.[47]

In a third case, *Brandon Films, Inc.* v. *Arjay Enterprises, Inc.*,[48] the plaintiff sued for infringement of its alleged common law rights to two motion pictures it had leased commercially for over 35 years to exhibitors. The defendant motioned for summary judgment to dismiss the complaint on the grounds that plaintiff's motion pictures were published without notice and were, therefore, in the public domain. The court granted plaintiff's motion for summary judgment holding that the commercial leasing of the motion pictures was not a publica-

---

[45] Blanc v. Lantz, *supra* note 38, at 139-40.

[46] *Id.* at 140 (emphasis added).

[47] *Id.* at 142. Support for this author's interpretation of the Blanc case is found in a later California district court case. In McIntyre v. Double—A Music Corporation, 119 *USPQ* 106, at 107 (Cal. Dist. Ct. 1958), a case not coming under the broad publication statute found in the Blanc case, the court cited Blanc for the proposition that the "*general* publication" of a work destroyed any common law protection the author may have theretofore had. By using the Blanc case as precedent for such a proposition, the California court was apparently of the opinion that the Blanc case stood for more than the narrow statutory construction interpretation.

[48] 33 Misc. 2d 794, 230 N.Y.S. 2d 56 (Sup. Ct. 1962).

tion. The court's sole precedent for its conclusion was the case of *DeMille Co.* v. *Casey*,[49] another New York Supreme Court decision. The court distinguished the *Blanc*[50] case by stating that the California court was involved in the construction of a particular California statute defining publication, and was, therefore, no authority for defendant's position.[51]

However, it is submitted that the precedent relied on by the *Brandon* court does not support the decision reached in the case. In the *DeMille* case the plaintiff sued both for damages under a license and for copyright infringement. Plaintiff, the owner of certain stories, had licensed the defendant to make and distribute a motion picture based on the underlying work belonging to plaintiff. After the motion picture was made, leased, and exhibited, the defendant defaulted on payments required under the license arrangement with the plaintiff. The plaintiff thereupon gave notice of rescission to the defendant, but the latter continued to lease the motion picture for commercial exhibition. The *DeMille* court found little trouble in granting damages prior to the notice of rescission, since the damages were based on the lease contract. However, because the contract was a nullity after the rescission, the plaintiff thereafter had to base its claim for relief on protection outside the contract, that is, on copyright. Plaintiff, therefore, contended that its rights were protected under common law. The defendant, in turn, argued that plaintiff's underlying work was in the public domain because the motion picture was published by the distribution of copies of the film through a commercial lease arrangement.

The court in attempting to answer defendant's argument stated:

> Performance of an ordinary play has never been held to be a publication. The mere performance of a photoplay can have no different result; nor can the leasing of the latter or the furnishing of the film constitute a dedication under the circumstances here shown. Furthermore, as defendants conceded, the question of publication is largely one of intention. The court, in *American Press Assn.* v. *Daily Story Publ. Co.*, 120 Fed. 766, 57 C.C.A. 70, 66 L.R.A. 444, held that where one is licensed to publish a work he may not be an agent of the licensor with power to dedicate such work to the public, and that the publication of such copyright work only has such effect where it is done with the consent of the proprietor, and is actually so intended, the licensee acquiring the privilege of publishing but no proprietary rights in the copyright.[52]

---

[49] 121 Misc. 78, 201 N.Y.S. 20 (Sup. Ct. 1923).

[50] Blanc v. Lantz, 83 *USPQ* 137 (Cal. Super. Ct. 1949).

[51] *But see* pp. 1145-1146 *supra*.

[52] DeMille Co. v. Casey, *supra* note 49, at 88, 201 N.Y.S. at 28.

By granting damages for the period after rescission, the *DeMille* court held that plantiff's work was still protected at common law. However, the exact reason for this holding is unclear, as seen from the court's wording above. A careful reading of the opinion will disclose that the statement made by the court (that the "leasing" or "furnishing of the film" was not a publication of the film) was only *dictum.* It is submitted the true holding of the *DeMille* case was that *even if* the motion picture was published, the underlying work was not published when such a dedication occurred as the result of the acts of a licensee who was not authorized to publish the work.[53] There was, therefore, no need for the supposition that the motion picture was, in fact, published.

As a consequence of the analysis of the above three major cases, the following conclusions may be drawn. The *Brandon* case[54] held that the commercial distribution of copies of a film by a lease arrangement is *not* a publication of the film. However, because the sole precedent for the court's decision represented only *dictum,* the case carries small persuasive weight. The *Blanc* case[55] stated that the commercial distribution of prints of a motion picture under a lease arrangement, coupled with the exhibition of the film, constitutes a divestive publication of the motion picture. Nevertheless, the commentators have cast considerable doubt on the scope of the case's holding; and even if this doubt is not justified,[56] it substantially reduces the value of the case as precedent. And lastly, the *O'Neill* court[57] implicitly held that the distribution of a film under a commercial lease arrangement does not divest common law protection. This case is probably the most persuasive of the three, but this author is unsure whether the issue of publication was properly brought before the court, that is, whether the defendant forcefully averred that publication occurred on November 1, 1912 when copies of the motion picture were commercially leased and exhibited and that, therefore, the court had no jurisdiction to grant relief for any infringement after that date. The issue was probably not so presented because the defendant would have also been liable under the federal statute, since the federal requirements were apparently met by the plaintiff at the time he leased the prints. If such is the case, the *O'Neill* decision is less controlling than would at first appear.

---

[53] *Accord,* M. Nimmer, *Nimmer on Copyright* 222 (1967).
[54] Brandon Films, Inc. v. Arjay Enterprises, Inc., *supra* note 48.
[55] Blanc v. Lantz, *supra* note 38.
[56] *See* pp. 1145-1146 *supra.*
[57] O'Neill v. General Film Co., *supra* note 33.

Given the lack of substantial cases directly deciding the issue of whether the distribution of a motion picture under a commercial lease arrangement divests common law protection, arguments based on cases with factual situations analogous to motion picture distribution practices[58] and an argument based on the Patent-Copyright Clause of the Constitution will be discussed.

The first group of analogous cases to be discussed deal with the leasing of books by the author.[59] In probably the most important of the cases, *Jewelers' Mercantile Agency, Ltd.* v. *Jewelers' Weekly Publ. Co.*,[60] the plaintiff distributed a semi-annual reference book which gave current information concerning the jewelers' industry. The books were leased only to subscribers who agreed that the material in the reference book was to remain completely confidential. The defendant contended that the book had been published and that the state court had, therefore, no jurisdiction to grant relief. The New York Court of Appeals found that there was little, if no, selection of persons to whom the leasing arrangement was available[61] and thereupon decided that a publication of the reference book had taken place.

> But our examination leads us to the conclusion that the present state of the law is that, if a book be put within the reach of the general public, so that all may have access to it, no matter what limitations be put upon the use of it by the individual subscriber or lessee, it is published, and what is known as the common law copyright, or right of first publication, is gone.[62]

---

[58] Theoretically, a limitation on the number of persons having access to copies of a work must be present to maintain common law protection. *See* note 9 *supra*. However, a study attempting to determine the scope of that limitation quantitatively has proven unsatisfactory. *Compare* American Visuals Corporation v. Holland, 239 F. 2d 740 (2d Cir. 1956) (free distribution of 100 proof copies of a safety booklet held to be a publication) and Continental Casualty Company v. Beardsley, 253 F. 2d 702 (2d Cir. 1956), *cert. denied*, 358 U.S. 816 (1958) (free distribution of 100 copies of an insurance plan held to be a publication) *with* Hirshon v. United Artists Corp., 100 U.S. App. D.C. 217, 243 F. 2d. 640 (1957) (free distribution of 2000 copies of sheet music held not to be a publication) and King v. Mister Maestro, Inc., 224 F. Supp. 101 (S.D.N.Y. 1963) (free distribution of text copies of speech to national press personnel held not to be a publication).

[59] The distinction between a distribution of copies of a work under a lease arrangement or a loan agreement appears to make a definite difference in the outcome of this group of cases. Allen v. Walt Disney Productions, 41 F. Supp. 134 (S.D.N.Y. 1941) (*loan* of sheet music to a limited number of piano players and orchestra conductors held not to be a publication); *accord*, Burnett v. Lambino, 204 F. Supp. 327 (S.D.N.Y. 1962); McCarthy & Fischer, Inc. v. White, 259 F. 364 (S.D.N.Y. 1919).

[60] 155 N.Y. 241, 49 N.E. 872 (1898).

[61] The court found that anyone willing to pay the price of the subscription to the reference book could become a lessee. *Id.* at 251, 49 N.E. at 874-75.

[62] *Id.* at 254, 49 N.E. at 876.

In two cases involving the leasing of books which followed the *Jewelers'* case, the courts chose to narrowly construe the New York Court of Appeals' decision and thereby to weaken its holding. In *F. W. Dodge Co.* v. *Construction Information Co.*[63] the plaintiff leased reference books to subscribers in the construction business who agreed not to divulge the book's contents. The content of the reference books was changed periodically, sometimes daily, by a series of information slips to be placed in the book as the slips were received by the subscribers. The defendant contended that by such a distribution the work had been published and that the Massachusetts court did not have jurisdiction. The Massachusetts Supreme Judicial Court found the work had not been published and distinguished the *Jewelers'* case by saying:

> The thing sent out in [the *Jewelers'* case] was a book designed to be preserved and used for a considerable time. It was in a convenient form for transfer from hand to hand, and for use from time to time by different persons. We do not think [the *Jewelers'* case] very much resembles the case before us. The information given by the plaintiff in this case . . . is of specific facts for particular persons or classes of persons, adapted to their interests, and furnished from time to time as the facts are ascertained. It seems very unlike the sale or loan of a large printed book, to be printed among a large class of persons.[64]

The distinction made by this Massachusetts court was followed by a New York Supreme Court in a case involving the same reference book company and almost the same facts. In *F. W. Dodge Corporation* v. *Comstock*[65] the plaintiff again based its suit on alleged common law rights in the work. The defendant, in turn, contended that the work, the *Dodge Reports,* had been published when copies were distributed to subscribers of the plaintiff's service. This New York court followed the earlier Massachusetts *Dodge* case[66] and found that the distribution of copies did not amount to a general publication. Although the defendant relied on the *Jewelers'* case, the court distinguished its own decision from that holding and stated:

> The [*Jewelers'*] case simply holds, if a book is put within the reach of the general public so that all have access to it, no matter what limitations be put upon the use of it by individual subscribers or lessees, it is published, and what is known as the common law copyright, or right of first publication, is gone. In the present case, however, the Dodge Reports were never put within the reach of the general public so it could have access to them.[67]

---

[63] 183 Mass. 62, 66 N.E. 204 (1903).
[64] *Id.* at 65, 66 N.E. at 206.
[65] 140 Misc. 105, 251 N.Y.S. 172 (1931).
[66] F. W. Dodge Co. v. Construction Information Co., *supra* note 63.
[67] F. W. Dodge Corp. v. Comstock, *supra* note 65, at 110, 251 N.Y.S. at 178.

However, it is submitted that the *Jewelers'* case was not adequately distinguished, and that the two *Dodge* cases and the *Jewelers'* case stand for opposite holdings on essentially the same facts. In the New York *Dodge* case[68] the defendant obtained copies of the report through an attorney. The attorney subscribed to the report to which, the court had contended, the public (other than those in the construction industry) had no access. Also, although the decision fails to so disclose, the lease arrangement in the Massachusetts *Dodge* case[69] was probably available to all who could pay the subscription charges. Hence, because the general public did, in fact, have access to the reference books in both of the *Dodge* cases, the distinction between the *Jewelers'* case and the *Dodge* cases is illusory.

The second part of the discussion of analogous cases deals with the distribution of copyrightable market quotations. In *Board of Trade of Chicago* v. *Hadden-Krull Co.*[70] the plaintiff transmitted its stock market quotations over ticker tape machines which were leased by brokers, who exhibited the quotations obtained from the ticker tape on a blackboard in their offices to the brokers' customers. All brokers who could pay for the service were allowed to lease the ticker tape machines from plaintiff, and only customers of the plaintiff could receive the quotations. The defendant contended that publication of the quotations occurred when they were transmitted by the plaintiff over the leased ticker tape machines. However, the court found that no publication had occurred by such a transmission because only the customers of the plaintiff and not the general public had access to the ticker tape on which the quotations were typed.

> In recent cases . . . it appears to have been held in reference to printed matter that the fact that a limitaion was placed upon the nature of the use of the copies delivered would not prevent the delivery from constituting a publication, if access by the public was open, and there was no restriction on the extent or number of persons having such access or use.[71]

On the same facts, the U.S. Court of Appeals for the Second Circuit in *Board of Trade of Chicago* v. *Tucker*[72] followed the reasoning of the above decision by finding that publication of the market quotations did not occur when the ticker tape reached the brokers' offices or when exhibited on the blackboard before the brokers' customers.

---

[68] *Id.* at 106, 251 N.Y.S. at 174.

[69] F. W. Dodge Co. v. Construction Information Co., *supra* note 63.

[70] 109 F. 705 (E.D. Wis. 1901).

[71] *Id.* at 706.

[72] 221 F. 305 (2d Cir. 1915). *But see* Board of Trade v. Christie Grain & Stock Co., 198 U.S. 236 (1905).

The applicability of these two cases to the distribution of a motion picture is clear. If the courts hold (as they did in the two above mentioned cases) that no divestive publication occurs when copies of copyrightable material are transferred under a lease arrangement to customers of the copyright owner and when the contents of the copies so transferred may only be exhibited by the lessee, the distribution of copies of a motion picture under a similar arrangement should also not constitute a publication.

Summarizing the discussion of analogous cases, it is submitted that the cases are not conclusive on the major issue of this paper. The *Jewelers* case,[73] upon which many commentators have often relied to substantiate the conclusion that publication does occur when a motion picture is commercially leased to exhibitors,[74] does not support by itself that conclusion in light of the two *Dodge* cases.[75] In addition, the "ticker tape" cases[76] are of only persuasive value, and are certainly not controlling on the issue of this paper.

The third and last discussion in this paper involving the issue of divestive publication of a commercially leased motion picture is based on the Patent-Copyright Clause of the United States Constitution which states:

> The Congress shall have Power . . . To promote the Progress of Science . . . , by securing for limited Times to Authors . . . the exclusive Right to their . . . Writings. . . .[77]

With this particular Clause, the Founding Fathers of the United States gave the federal legislature the power to create a federal system of copyright protection, which protection had theretofore been a power in the hands of the several Colonies. Prior to the adoption of the U.S. Constitution nearly every Colony had some copyright protection for its own citizens,[78] and it was felt that uniformity of protection on the federal level was needed to solve the chaotic situation which had developed as the result of the differences in copyright protection in each of the Colonies.[79]

---

[73] Jewelers' Mercantile Agency, Ltd. v. Jewelers' Weekly Publ. Co., 155 N.Y. 241, 49 N.E. 872 (1898).

[74] *See e.g.*, A. Latman, *Howell's Copyright Law* 64 (4th ed. 1962); M. Nimmer, *Nimmer on Copyright* 217 (1967).

[75] F. W. Dodge Co. v. Construction Information Co., 183 Mass. 62, 66 N.E. 204 (1903); F. W. Dodge Corp. v. Comstock, 140 Misc. 105, 251 N.Y.S. 172 (1931).

[76] Board of Trade of Chicago v. Hadden-Krull Co., 109 F. 705 (E.D. Wis. 1901); Board of Trade of Chicago v. Tucker, 221 F. 305 (2d Cir. 1915).

[77] U.S. Const. art. I, § 8, cl. 8.

[78] Metro-Goldwyn-Mayer Distributing Corp. v. Bijou Theatre Co., 59 F. 2d 70, 72 (1st Cir. 1932) (dictum).

[79] *The Federalist No. 43* (Madison) states that the States could not separately

However, Congress was not vested by this Clause with anything akin to the royal prerogative in the creation and bestowal of monopolistic privileges as found in early England. The Congressional powers were limited as to subject matter, as to the purpose of the power, and especially, as to the duration of the rights granted under the power. Only the writings of authors could be protected, and then only for the end of promoting science. In addition, the Founding Fathers continually emphasized that the copyright monopoly could be granted for only "limited Times" and that Congress should be prevented from enacting legislation under which a perpetual copyright could be granted.[80]

Congress has chosen to exercise the power enumerated in the Patent-Copyright Clause by enacting federal legislation, which grants protection for certain writings for a maximum of 56 years in accordance with the "limited Times" provision of the Patent-Copyright Clause.

This federal copyright statute,[81] like other laws of the United States enacted pursuant to Constitutional authority, excludes the States under the Supremacy Clause of the Constitution[82] from interfering with the policy of and protection granted by the federal statute.[83] And as seen above, by adopting the Patent-Copyright Clause the Founding Fathers intended to create uniformity in the law of copyright and to limit in some way the duration of the monopoly granted authors. As a

---

make effective provision for copyright protection and that the "public good" demanded uniform protection of literary property; *accord,* 28 U.S.C. § 1338(a) (1948) (statute vests exclusive jurisdiction to hear copyright cases coming under the federal copyright statute in federal courts). *See also* S. Bricker, "Thirty Months After Sears and Compco," *Bulletin of the Copyright Society,* Vol. 14 (1967), p. 293, at 301 (author states that the need for uniformity of copyright protection is today even more critically required because of the present day complex communications media).

[80] In every resolution considered by the Committee of the Constitutional Convention in charge of drafting the Patent-Copyright Clause there appeared a "limited Times" provision. The Constitutional Convention itself when the final draft of the Clause was submitted adopted the clause without any debate and without any change. Fenning, "The Origin of the Patent and Copyright Clause of the Constitution," *Georgetown Law Journal,* Vol. 17 (1929), pp. 109, 112-13; *see* Marx v. United States, 96 F. 2d 204, 206 (9th Cir. 1938) (a federal statute granting copyright protection in perpetuity would be unconstitutional).

[81] Title 17, United States Code (1947).

[82] U.S. Const. art. VI.

[83] Sola Electric Co. v. Jefferson Electric Co., 317 U.S. 172, 176 (1942). The Copyright Act has preempted State protection of literary property at least insofar as all published works covered by the federal statute are concerned. Thompson v. Hubbard, 131 U.S. 123, 151 (1889); Banks v. Manchester, 128 U.S. 244, 251-52 (1888); Wheaton v. Peters, 33 U.S. (8 Pet.) 591, 663-64 (1834); *accord,* Metro-Goldwyn-Mayer Distributing Corp. v. Bijou Theatre Co., 59 F. 2d 70, 74 (1st Cir. 1932).

consequence, any State statute or decision which interferes with either of these two policies underlying the federal legislation would violate the Supremacy Clause of the Constitution.

Numerous members of the Judiciary[84] and the Copyright Bar,[85] following upon the above reasoning, point out that a State court through the concept of "limited publication" may subvert the policies which underlie the Patent-Copyright Clause by granting to an author copyright protection in perpetuity. Therefore, it is suggested by them that the issue of publication is a federal question, that is, the issue of publication should be decided in light of the Constitutional mandate for uniformity of decision and against perpetual protection of literary property.

Perhaps the most eloquent of the spokesmen in favor of applying federal standards to the issue of publication was the late Judge Learned Hand. In a dissenting opinion in *Capital Records, Inc.* v. *Mercury Records Corp.*,[86] Judge Hand stated that if the States could decide whether a work was published or not

> [i]t would then follow that they could grant to an author a perpetual monopoly, although he exploited the "work" with all the freedom he would have enjoyed, had it been copyrighted [under the federal statute]. . . . To do so would pro tanto defeat the overriding purpose of the Clause, which was to grant only for "limited times" the untrammelled exploitation of an author's "Writings." Either he must be content with such circumscribed exploitation as does not constitute "publication," or he must eventually dedicate his "work" to the public. . . . I would hold that the [Copyright] clause has that much effect ex proprio vigore; and that the states are not free to follow their own motions as to when an author's right shall be unlimited . . . in duration. . . . I submit that, once it is settled that a work is [a "Writing"], the Clause enforces upon the author the choice I have just mentioned; and, if so, *it must follow that it is a federal question whether he has published the "work."*[87]

---

[84] International News Service v. Associated Press, 248 U.S. 215, 250 (1918) (dissenting opinion by Justice Brandies); Shapiro, Bernstein & Co., Inc. v. Miracle Record Co., Inc., 91 F. Supp. 473, 475 (N.D. Ill. 1950); *accord,* Blanc v. Lantz, 83 *USPQ* 137, 139 (Cal. Super. Ct. 1949).

[85] *See* S. Bricker, "Thirty Months After Sears and Compco," *Bulletin of the Copyright Society,* Vol. 14 (1967), pp. 293, 301; B. Kaplan, "Publication in Copyright Law: The Question of Phonograph Records," *University of Pennsylvania Law Review,* Vol. 103 (1955), pp. 469, 479; M. Nimmer, *Nimmer on Copyright* 230 (1967). *Contra,* H. Kalodner and V. Vance, "The Relation Between Federal and State Protection of Literary and Artistic Property," *Harvard Law Review,* Vol. 72 (1959), pp. 1079, 1094; J. Whicher, "The Ghost of Donaldson v. Beckett: An Inquiry into the Constitutional Distribution of Powers over the Law of Literary Property in the United States," *Bulletin of the Copyright Society,* Vol. 9, Pt. 1 at 102 (1961), and Pt. 2 at 194 (1962).

[86] 221 F. 2d 657 (2d Cir. 1955).

[87] *Id.* at 667 (emphasis added). *See* R.C.A. Manufacturing Co. v. Whiteman, 114

In two recent cases the Supreme Court has given substantial support to the proposition that publication is a federal, and not a state, question. In the first case, *Sears, Roebuck & Co.* v. *Stiffel Co.*,[88] the plaintiff based his relief on two counts: (1) infringement of a design patent and a utility patent granted under federal law and (2) unfair competition under Illinois law. The lower federal courts found that plaintiff's two patents were invalid, but granted the plaintiff relief in the form of an injunction based upon Illinois unfair competition law. The Supreme Court reversed the decision holding that a State could not, consistent with the Supremacy Clause of the Federal Constitution, give protection of a kind that clashes with the objectives of federal policy, whether by state unfair competition law or any other state law. Although referring to patent law, Justice Black's statements in the case are equally applicable to copyright.

> To allow a State by use of its law of unfair competition to prevent the copying of an article which represents too slight an advance to be patented would be to permit the State to block off from the public something which federal law has said belongs to the public. The result would be that while federal law grants only 14 to 17 years' protection to genuine inventions . . . , States could allow perpetual protection to articles too lacking in novelty to merit any patent at all under federal constitutional standards. This would be too great an encroachment on the federal patent system to be tolerated.[89]

In a sister patent case, *Compco Corp.* v. *Day-Brite Lighting, Inc.*,[90] upon essentially the same facts as the *Sears* case Justice Black more directly applied the *Sears* holding to copyright law.

> Today we have held in *Sears* . . . that when an article is unprotected by a patent or *copyright*, state law may not forbid others to copy that article. To forbid copying would interfere with the federal policy, found in Art. I, § 8, Cl. 8, of the Constitution and in the implementing federal statutes, of allowing free access to copy whatever the federal patent and *copyright* laws leave in the public domain.[91]

While most of the copyright decisions following upon the *Sears* and

---

F. 2d 86, 89 (2d Cir.), *cert. denied*, 311 U.S. 712 (1940); Cheney Bros. v. Doris Silk Corp., 35 F. 2d 279, 280 (2d Cir. 1929), *cert. denied*, 281 U.S. 728 (1930).

[88] 376 U.S. 225 (1964).

[89] *Id.* at 232. In a footnote in the written decision of this case Justice Black emphasized the federal policy of achieving national uniformity in the law of copyright, implying that federal, that is, Constitutional, standards should be used to determine whether a "Writing" may be protected either by State or federal law consistent with federal policies. *Id.* at 231n. 7.

[90] 376 U.S. 234 (1964).

[91] *Id.* at 237 (emphasis added).

Compco cases have either attempted to narrowly construe the broad language of the Supreme Court[92] or have sought to distinguish the cases' application to copyright as *dictum*,[93] the United States Court of Appeals for the Ninth Circuit in *Cable Vision, Inc.* v. *KUTV, Inc.*[94] indicated its willingness to apply the broad language of *Sears* and *Compco* to the copyright field.

> As we read *Sears* and *Compco* . . . only actions for copyright infringement *or such common-law actions as are consistent with the primary right of public access to all in the public domain will lie.*
>
> In *Compco*, the court emphasized that the federal policy found in Art. I, § 8, Cl. 8 of the Constitution and in the implementing federal statutes is to allow "* * * free access to copy whatever the federal patent and copyright laws leave in the public domain. . . ." The public domain was broadly delineated in *Sears*: that which is either not copyrighted [under the federal statute], not copyrightable or on which the copyright has expired is in the public domain. . . . Thus when an article is unprotected by a patent or copyright, state law may not forbid a person not the originator to merely copy and commercially exploit that article, for such a law would enable the originator to accomplish with the left hand of state authority what he was unable to accomplish with the right hand bearing the authority of the primary federal interest. . . . No state intrusion of the federal field is permissible unless the law of the state meshes in purpose and effect with the announced objectives of federal copyright law. . . . *A limited ambit of operation is accorded state law but it may be exercised only insofar as consistent with the paramount federal interest.*[95]

From the discussion above, it is probable that the United States Supreme Court would favor the proposition that the issue of publica-

---

[92] *See* Edgar H. Wood Associates, Inc. v. Skene, 347 Mass. 351, 356, 197 N.E. 2d 886, 890 (1964); Capital Records, Inc. v. Greatest Records, Inc., 43 Misc. 2d 878, 880-81, 252 N.Y.S. 2d 553, 557 (1964) (court reaffirmed the majority opinion in Capital Records, Inc. v. Mercury Records Corp., note 86 *supra* and thereby refused to support Judge Hand's argument in favor of applying Constitutional standards to the issue of divestive publication); Columbia Broadcasting System, Inc. v. Documentaries Unlimited, Inc., 42 Misc. 2d 723, 726-27, 248 N.Y.S. 2d 809, 812 (1964); Flamingo Telefilm Sales, Inc. v. United Artists Corp., 141 *USPQ* 461 (N.Y. Sup. Ct. 1964), *remand to amend complaint,* 22 App. Div. 2d 778, 254 N.Y.S. 2d 36 (1964), *aff'd,* 24 App. Div. 953, 265 N.Y.S. 2d 444 (1965) (plaintiff changed his original pleading from one based on copyright "misappropriation" to a cause of action based on common law conversion).

[93] Pottstown Daily News Publishing Co. v. Pottstown Broadcasting Co., 247 F. Supp. 578, 580-81 (E.D. Pa. 1965).

[94] 335 F. 2d 348 (9th Cir. 1964), *cert. denied,* 379 U.S. 989 (1965).

[95] *Id.* at 350-51 (citations omitted and emphasis added); *accord,* Columbia Broadcasting System, Inc. v. De Costa, 377 F. 2d 315, 319 (1st Cir. 1967), *cert. denied,* 389 U.S. 1007 (1968) (court cited with approval Judge Hand's argument in applying Constitutional standards to the field of copyright protection in Capital Records, Inc. v. Mercury Records Corp., note 81 *supra*).

tion should be determined only by application of the Constitutional standard of limiting the duration of protection of a writing protected by the federal statute. If such is the case, motion pictures, which are specifically protected under the federal statute,[96] could not be granted copyright protection in perpetuity under either state or federal law. The courts would be forced, under the Constitutional mandate, to find a divestive publication at some point in the distribution chain of a commercially leased motion picture; otherwise, the vast majority of motion pictures, intended by Congress to be protected for only "limited Times," could avoid that Constitutional limitation.

Assuming the correctness of the above analysis, the courts would be confronted with the problem of finding the point in time along the distribution chain of a commercially leased motion picture that would be most appropriate to divest common law protection. Because of the long line of cases mechanically holding that public performance does not constitute a general publication,[97] the courts would probably not find that the exhibition of a motion picture would constitute a divestive publication. The courts could more easily find a divestive publication of a motion picture when the film is actually leased by the distributor, since there is considerable doubt whether a divestiture does not take place at that point in the distribution chain.[98]

Motion Picture Publication Under The Revision Bill

The concept of publication remains important to the duration of protection of motion pictures under the Revision Bill.[99] Under the Bill motion pictures are again specifically covered by federal copyright protection,[100] but the scope of the term, motion picture, was broadened to include certain related communication devices.[101]

---

[96] The motion picture is specifically covered both as a published work [17 U.S.C. § 10 (1947)] and as an unpublished work [17 U.S.C. § 12 (1947)]. Motion pictures were not specifically mentioned in the Copyright Act until three years after the Act's original enactment in 1909. 37 Stat. 488 (1912). A claim to copyright for a motion picture photoplay is registered under Class L (Class LP for published and Class LU for unpublished motion picture photoplays), and a claim to copyright for a motion picture other than a photoplay is registered under Class M (Class MP for published and Class MU for unpublished nonphotoplay motion pictures). 17 U.S.C. §§ 5(l) and 5(m) (1947).

[97] *See* cases cited notes 21, 22 and 23 *supra*.

[98] *See* note 32 *supra*.

[99] H.R. 2512, 90th Cong., 1st Sess. (1967); S. 597, 90th Cong., 1st Sess. (1967) [hereinafter cited as Bill].

[100] Bill § 102 (6).

[101] *See Supplementary Report of the Register of Copyrights on the General*

Generally, a work covered under the Bill created on or after the effective date of the Bill would be granted federal copyright protection from the time the work was created to 50 years after the author's death.[102] However, for works made for hire[103] the protection would endure for a term of 75 years from the year of the work's first publication, or for a term of 100 years from the year of its creation, whichever expired first.[104] Since a motion picture is generally considered a work made for hire,[105] the motion picture industry will still be haunted by the concept of publication under the Bill.

The term, "publication," a definition of which is not in the present Copyright Act,[106] is specifically defined in the Bill.

> "Publication" is the distribution of copies or phonorecords of a work to the public by sale or other transfer of ownership, or by rental, lease, or lending.[107]

Although the drafters of the Bill had originally attempted to include the public performance of a work as an action divesting common law protection,[108] there were sufficient objections lodged against the use of "public dissemination" as a substitute for "publication"[109] that the words were dropped.[110] As a consequence, the mere public performance or exhibition of a motion picture is not a "publication" under the Bill.[111]

Revision of the U.S. Copyright Law: 1965 Revision Bill, Copyright Law Revision—Part 6, at 5 (1965) [hereinafter cited as *Copyright Law Revision—Part 6*]; *H.R. Rep. No. 83,* 90th Cong., 1st Sess., at 16 (1967).

[102] Bill § 302 (a).

[103] A "work made for hire" is defined as "(1) a work prepared by an employee within the scope of his employment; or (2) a work specially ordered or commissioned for use as a contribution to a collective work, *as a part of a motion picture* . . . if the parties expressly agree in a written instrument signed by them that the work shall be considered a work for hire." Bill § 101 (emphasis added). *See also Copyright Law Revision—Part 6,* at 67-68 (1965).

[104] Bill § 302 (c).

[105] Zahler v. Columbia Pictures Corp., 180 *California Appellate* Reports, Second Series, pp. 582, 589, 4 *California Reporter,* pp. 612, 617 (1960); Metro-Goldwyn-Mayer Distributing Corp. v. Bijou Theatre Co., 59 F. 2d 70, 77 (1st Cir. 1932).

[106] *See* note 5 *supra.*

[107] Bill § 101.

[108] *Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law* 40 (1961).

[109] *See Discussion and Comments on Report of the Register of Copyrights on the General Revision of the U.S. Copyright Law, Copyright Law Revision—Part 2,* at 74-75, 229, 261 (1963).

[110] *Copyright Law Revision—Part 6,* at 82-83 (1965).

[111] *H.R. Rept. No. 83,* 90th Cong., 1st Sess., at 105 (1967); *see Copyright Law Revision—Part 6,* at 91 (1965); *Preliminary Draft for Revised U.S. Copyright Law and Discussions and Comments on the Draft—Copyright Law Revision—Part 3,*

The biggest problem with the new definition of "publication" in the Bill revolves around the words, "to the public." Under the definition, in order for there to be a publication of a motion picture, the film must either be sold, had its ownership transferred, be rented, leased, or loaned *to the public.* However, as stated above, motion pictures are normally leased only and then only to exhibitors who may not be considered the "public."

Abraham L. Kaminstein, Register of Copyrights, in his report on the Bill stated that the "public" referred to in the definition:

> is intended, very generally, to refer to persons who are under no express or implied restrictions with respect to the disclosure of a work's contents, but we believe that the situations here are so variable that this particular concept of "the public" is better left undefined in the statute.[112]

It might appear from this statement of Mr. Kaminstein, that the concept of limited publication in relation to motion pictures would still have considerable life under the Bill and that there would be no resolution of the indefiniteness that presently plagues this area of the law.

However, Mr. Kaminstein, in a statement made prior to the one cited above, specifically applied the definition of publication under the Bill to motion pictures and testified that the word "rental" in the definition was intended to include the rental of motion pictures as an action constituting publication under the Bill.[113] Based on this expressed intention of the drafters of the Bill, the courts would probably find that either a sale, a change of ownership, a rental, a lease, or a loan of a motion picture to exhibitors would be a publication under the Section 101 definition of the Bill.

Conclusion

In summary, none of the three arguments under the existing case law alone is conclusive on whether a commercial leasing of a motion picture would constitute a divestive publication. But it is submitted that the three arguments taken together would lead courts to find that there is no divestiture of common law rights to a motion picture when

---

note 14 at 18 (1964). *See also Further Discussions and Comments on Preliminary Draft for Revised U.S. Copyright Law—Part 4* [hereinafter cited as *Copyright Law Revision—Part 4*], at 22 (1964) (exhibition by television broadcast intended not to be a publication).

[112] *Copyright Law Revision—Part 6,* at 91 (1965).

[113] *Copyright Law Revision—Part 4,* at 24 (1964). *See also H.R. Rept. No. 83,* 90th Cong., 1st Sess., at 105 (1967).

a film is commercially leased to exhibitors. The *O'Neill*[114] and *Brandon*[115] cases directly support this conclusion; and while the *Blanc* case[116] appears to support a contrary position, its holding will probably not be followed because of the doubt surrounding the case (even in light of the discussion above[117]).

The *Jewelers'* case,[118] although cited frequently for the proposition that publication of a motion picture takes place when prints are commercially leased, is insufficient to support that proposition because the *Dodge* cases,[119] on approximately the same facts, came to a contrary conclusion. The "ticker tape" cases,[120] on the other hand, although not controlling on the issue, are certainly persuasive support for this author's conclusion.

It is submitted, however, that the reasoning used by the Supreme Court in the *Sears*[121] and *Compco*[122] cases will eventually prevail on the publication issue. This opinion is based on the assumption that the Supreme Court fully intended to use the broad language that it, in fact, did use. And although no precedent directly supports this contention, the Ninth Circuit Court of Appeals in the *Cable Vision* case[123] indicated a trend in that direction. Nevertheless, courts have presently been unwilling to fully apply the *Sears* and *Compco* language, and therefore, it cannot be stated at this time that an argument based on the Constitutional aversion to perpetual copyrights would prevail.

As stated earlier, the Revision Bill may resolve the legal ambiguity presently surrounding the issue of publication as applied to motion pictures.[124] However, because the testimony regarding the expressed intention of Congress on this issue is so meager, it is suggested that Congress in future hearings on a copyright bill should attempt to delineate more specifically if or when a commercially leased motion picture is published.

---

[114] O'Neill v. General Film Co., 171 App. Div. 854, 157 N.Y.S. 1028 (1916).

[115] Brandon Films, Inc. v. Arjay Enterprises, Inc., 33 Misc. 2d 794, 230 N.Y.S. 2d 56 (Sup. Ct. 1962).

[116] Blanc v. Lantz, 83 *USPQ* 137 (Cal. Super. Ct. 1949).

[117] *See* pp. 1145-1146 *supra.*

[118] Jewelers' Mercantile Agency, Ltd. v. Jewelers' Weekly Pub. Co., 155 N.Y. 241, 49 N.E. 872 (1898).

[119] F. W. Dodge Co. v. Construction Information Co., 183 Mass. 62, 66 N.E. 204 (1903); F. W. Dodge Corp. v. Comstock, 140 Misc. 105, 251 N.Y.S. 172 (1931).

[120] Board of Trade of Chicago v. Hadden-Krull Co., 109 F. 705 (E.D. Wis. 1905); Board of Trade of Chicago v. Tucker, 221 F. 305 (2d Cir. 1915).

[121] Sears, Roebuck & Co. v. Stiffel Company, 376 U.S. 225 (1964).

[122] Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S. 234 (1964).

[123] Cable Vision, Inc. v. KUTV, Inc., 335 F. 2d 348 (9th Cir. 1964), *cert. denied,* 379 U.S. 989 (1965).

[124] *See* note 113 *supra.*

Copyright Liability for Communication Satellites: A Bridge from CATV

ROGER WESLEY*

SUMMARY

THE UNITED STATES COPYRIGHT ACT of 1909 has been the subject of extensive amendment proposals for the past few years. In view of the recent expansion of space communications, copyright coverage with respect to performance rights is in need of fresh examination. It is thus the purpose of this paper to assess in detail the emergence of satellite systems, available international copyright remedies, conflicting interests and some possible solutions to extending copyright protection.

> No man is an island, entire of itself; every man is a piece of a continent, a part of the main. . . . Any man's death diminishes me, because I am involved in mankind and therefore never send to know for whom the bell tolls; it tolls for thee.
>
> John Donne

* This paper was prepared by the author in fulfillment of the Second Year legal writing requirement at The National Law Center of The George Washington University. It was awarded the Center's first prize in the 1968 Nathan Burkan Memorial Copyright Competition.

THE PRESENT DEVELOPMENT OF COMMUNICATION SATELLITES AS AN ENTERTAINMENT AND EDUCATIONAL MEDIUM

The emergence of satellites as a communication mechanism has brought a radical change to our traditional patterns of international commercial communications. While projected as the matrix of a global communication system, ComSat has, however, posed unusual problems for owners of copyright performance rights, for as an international medium of telecommunications, it encompasses a wide number of foreign jurisdictions.[1]

ComSat is essentially a private corporation for profit, organized and incorporated in the District of Columbia, although designed to promote an international policy of expanding the viewing and enjoyment of artistic and educational endeavors.[2] To further respect for the interests of copyright holders, ComSat has instituted reciprocal channel leasing to existing carriers in the United States and foreign countries who themselves now make arrangements for the use of available channel time.[3] Such efforts to increase the participation in program allocation, should help to ease the conflict in granting copyright protection among participating countries.[4] However, to meet the objectives of a full global system, a flexible framework was needed to ensure cooperation in the development of future ventures and the coordination to allocate and enforce the apportionment of channel frequencies, which are limited in availability.[5]

---

[1] Communications Satellite Act of 1962 (Declaration of Policy and Purpose), 76 Stat. 419 (1962), 47 U.S.C. s701 (Supp. IV, 1963). Hereinafter cited as Communications Satellite Act.

[2] See Hearings on S. 2650 and S. 2814 Before the Senate Comm. on Aeronautical and Space Sciences, 87th Cong. 2d Sess. (1962) [hereinafter cited as Hearings on S. 2650 and S. 2814], for a full discussion of the alternatives before Congress including government ownership and a communications common carrier consortium. For a further account of the importance and recommendations for constructing a satellite system, see Johnson, "Satellite Communications: The Challenge and the Opportunity for International Cooperation," *Federal Communication Bar Journal,* Vol. 19 (1965), p. 88; Marks, "Domestic Communication Satellites and International Cooperation," *American Society of International Law Proceedings,* Vol. 61 (1967), p. 36.

[3] Estep, "Some International Aspects of Communication Satellite Systems," *Northwest Law Review,* Vol. 58 (1963), pp. 237, 247.

[4] Hearings on S. 2650 and S. 2814, *op. cit. supra,* note 2 at 195; see also Schwartz & Goldsten, Foreign Participation in Communication Satellite Systems: Implications of Communication Satellite Act of 1962. The Rand Corp. Memorandum RM-3484-RC (Feb. 1963).

[5] See Staff on Senate Comm. on Aeronautical and Space Sciences, 87th Cong. 2d. Sess., Rep. on Communication Satellites 1962 at 98-127. [Comm. Print 1962].

Global Communications Agreement to Establish the International Telecommunications Satellite Consortium

The preamble of the Agreement Establishing Interim Arrangements for a Global Commercial Communications Satellite System, outlined its scope and purposes in "recalling the principles set forth in Resolution No. 1721 (XVI) of the General Assembly of the United Nations that communications by means of satellites be available to the nations of the world as soon as practicable on a global and nondiscriminating basis," and "believing that satellite communications should be organized in such a way as to permit all states to have access to the global system and those states so wishing to invest in the system with consequent participation in the design development, construction (including the provision of equipment), establishment maintenance, operation and ownership of the system."[6] The Agreement is an important beginning in efforts to provide an orderly framework for cooperation in the dramatic new venture of satellite broadcasting. So vast and complex is the area of telecommunications, that the radiotelephone frequency spectrum not only permits the international sharing of its benefits, but seems to demand such sharing.[7]

The consortium known as the International Telecommunications Satellite Consortium (INTELSAT), provides that member states be represented by a governmental or commercial telecommunications entity.[8] The primary policy making body in INTELSAT is the Interim Communication Satellite Committee (I.C.S.C.) of which members are represented on a quota basis.[9] In effect, the interim international arrangements established an unincorporated consortium or joint venture as the organizational means for achieving the objectives and implementing the concepts discussed above.[10]

In view of the increasing dependence on the international communications media, it is imperative that concurrent agreement amongst

---

[6] See Agreement with Other Governments establishing interim arrangements for a global communication satellite system with Special Agreement and Supplementary Agreement on Arbitration, Aug. 20, 1964 and June 4, 1965, 15 U.S.T. 1705, T.I.A.S. No. 5646 (INTELSAT, adopted Oct. 28, 1965, appears on T.I.A.S. January 1967 copies), hereinafter cited as INTELSAT Agreement.

[7] International Telecommunications Union, Semaphore to Satellite 274 (1965).

[8] INTELSAT Agreement, *supra* note 6.

[9] INTELSAT Agreement, *supra* note 131 at Art. IX of Agreement (Reprinted in *State Department Bulletin,* Vol. 51 (1964), pp. 281, 286.

[10] Johnson, "The Freedom of Outer Space: Some Problems of Sovereignty, Control and Jurisdiction," *NASA Conference on the Law of Space and of Satellite Communications* (Chicago: 1963) at 91-92.

transmitting and recipient nations be reached on the protection of broadcasting of performances, if the global system is to be assured of a sufficient distribution of quality programming.[11]

Encouraged by the active role of NASA in the experimental communications satellite program since its creation in 1958, other nations have recently joined NASA in cooperative efforts to fulfill the envisioned benefits from satellite relay communications.[12] However, to convince them acceptance of INTELSAT is a more effective means, both politically and economically, of expanding international communications, the allocation of power according to financial quotas, should not be promulgated as the sole criteria in the future regulatory policies of the consortium.[13] At the same time, the best way to maximize the use of technically and financially superior members for the benefit of all the signatories is probably to give the nation possessing such capabilities a strong enough voice that it can provide able leadership and thereby protect and further its investment.[14] Thus, as conditions will undoubtedly change, arrangements should adopt a formula that will also change as other participating states develop greater capabilities for making contributions.[15] A participation plan, which allows room for change in both financial and satellite utilization quotas, should be most responsive to member diversities in INTELSAT and any other permanent international policy-regulating body.[16]

The Competitive Soviet System

Presently competing with ComSat and its international offspring INTELSAT is the international satellite program of the Soviet Union

---

[11] See Gardner, "Cooperation in Outer Space," *Foreign Affairs Journal,* Vol. 41 (1963); Marks, "The Role of Broadcasters in Space Communications," *European Broadcasting Review,* Vol. 84 (Part B) (1964), p. 46; and Engstrom, "Future Implications of Communication Technology," *NASA Proceedings of the Fifth National Conference on the Peaceful Uses of Outer Space* (1965), p. 149, 151.

[12] For example, small narrow band experimental earth stations have since been constructed in Brazil, Italy, Spain, Japan, and Nigeria, while wideband stations have been constructed in Great Britain, France, and Germany. Frutkin, *International Cooperation in Space* (1963), pp. 41-74; *Telecommunication Satellites* (Gatlund ed. 1964).

[13] 1964 Interim Agreement, Art. IX T.I.A.S. No. 5646.

[14] Underwood, "Problems of Participation in the Global Commercial Communications Satellite Systems," *South Carolina Law Review,* Vol. 18 (1966), pp. 796, 815.

[15] COMSAT, 1965 Rept. to the President and Congress, 89th Cong. 1st Sess. at 12; 1966 Report, 89th Cong. 2d Sess., at 14, 15.

[16] Colino, "INTELSAT: Doing Business in Outer Space," *Columbia Journal of Transnational Law,* Vol. 6 (1967), pp. 17, 59.

and the socialist nations of the world.[17] Plans have already been made to link their domestic system with an international system.[18]

An area of conflict posing a serious bar to reciprocal copyright protection of the two major satellite systems, is the difference of telecommunication broadcasting standards, including frequency allocation and potential markets.[19] At the present, though the International Telecommunications Union has attempted negotiations, it has been unable to effect compliance with its frequency control recommendations and proposals for integrating the two systems.[20]

However, to avoid a proliferation of satellite systems that combine the antagonisms of local interests with world politics, integration, which will help to provide the common basis of interest necessary for the encouragement of further multilateral copyright protections, must be accomplished. For only the continued prospects of profit motivation to performing artists will sustain the continued outlays of capital necessary to expand the technical machinery of intercontinental broadcasting.[21]

Thus, failure to reach understanding and agreement with the Soviet Union on program allocations and copyright protection in the area of space broadcasting, will only perpetuate the use of self-help and limited coverage of programs as substitutes for legal redress for infringements. This is certainly inconsistent with the principles set forth in the General Assembly's Resolution on the Peaceful Uses of Outer Space, adopted in 1962, which imposes "international responsibility for national activities in outer space"[22] and declares that "states shall be guided by the principle of co-operation and mutual assistance."[23]

---

[17] See Staff on Senate Comm. on Aeronautical and Space Sciences, 89th Cong. 2d Sess., Rep. on Soviet Space Program 1962-65 at 327-29, 767-72. (Comm. Print 1962).

[18] In April of 1967, the Soviet Union and socialist representatives announced the intention "to create an international communication system via artificial earth satellites for transmitting television programs, telephone messages, and other types of information," to be "open to all countries willing to join it." *New York Times,* April 17, 1967, p. 9, Col. 5.

[19] Levin, "Organization and Control of Communication Satellites," *University of Pennsylvania Law Review,* Vol. 113 (1965), pp. 315, 330.

[20] For an account of the I.T.U.'s abortive attempt to gain an accepted solution see G. Codding, *The International Telecommunication Union* (1952), p. 438.

[21] See Doyle, "Communication Satellites: International Organization for Development and Control," *California Law Review,* Vol. 55 (1967), pp. 431, 445.

[22] Res. 1962 (XVIII), U.N. Gen. Assy. Off. Rec. 18th Sess., Supp. No. 15 (A/5515), par. 5, p. 15 (1963).

[23] *Id,* par. 6.

Other Systems

A further potential deviation from the theme of a global satellite is indicated by France's purported intention to institute a Stationary Orbit Radio Satellite (SAROS) project to construct a series of prototype and operational synchronous communication satellites.[24] To supplement this proposal, the French have announced plans to accede to a nine-country convention to create the European Space Research Organization (ESRO).[25]

In turn, the French proposal has encouraged similar interests in other countries, notably West Germany, which led to the adoption of a European Launcher Development Organization (ELDO) to develop practicable space vehicle launches.[26]

The effect of these programs on the efforts of INTELSAT to promote a united satellite system of mutual cooperation is not yet certain, but fears have been raised that multiple systems can only impede international negotiations of space communication activities.[27] To achieve success in the objective of the consortium to better international relations through the improvement of cultural exchange and commercial development, INTELSAT should work in liaison with the ITU in patterning its operations in a manner that will make participation and compliance with its directives in the interest of all users of telecommunications.

Availability of Copyright Remedies for Performances Carried By Satellite

Copyright protection to the benefits of an artist's creation has historical roots of recognition in the common law, the United States statute,[28] and the legislation of most foreign countries. It acknowl-

[24] Johnson, "France Backs U.N. INTELSAT Control," *Aviation Week & Space Technology* (Feb. 13, 1967), p. 26.

[25] See Staff of the Senate Comm. on Aeronautical and Space Sciences, Rep. on International Cooperation and Organization for Outer Space, S. Doc. No. 56, 89th Cong. 1st Sess. 105 (1965).

[26] Beller, "ELDO to Provide ComSat Launcher," *Technology Week* (July 18, 1966), p. 20.

[27] Levin, *supra* note 20. For a discussion of proposals for a substituted uniform satellite policy under the facilities of the U.N., see Trooboff, "INTELSAT: Approaches to the Renegotiation," *Harvard International Law Journal*, Vol. 9 (1968), pp. 1, 48.

[28] Nimmer, *Copyright*, § 3 (1) (1966) at 4. The "authorization to grant to individual authors the limited monopoly of copyright is predicated upon the dual premises that the public benefits from the creative activities of authors, and

edges individual artistry as an indispensable national resource. In past United States practice, though, only reproductive rights in creative works, such as dramas, non-dramatic literary works, and musical compositions, were given protection against infringing performance for profit.[29] Works of fact reporting and compilation, absent a special form or manner, have been excluded.[30] Some compilation protection was intended in *Markham v. A. E. Borden, Inc.* to combined works of otherwise separately copyrightable items, where the artist expended a modicum of original effort in organization.[31] Secondly, no copyright protection, until recently, existed for unauthorized publication of non-visual works. To constitute an infringing copy, the early rule set forth in *White-Smith Music Pub. Co. v. Apollo* required that there be "a writing or printed record in intellectual notation."[32]

As a result of the sweeping technological developments in radio and television, larger audiences are now able to hear and witness artists' performances over great distances. To keep pace with these new media of public communication, copyright protection against infringement has been construed to apply to the unlicensed transmission of unpublishable material under certain circumstances.[33] The content of such radio or TV transmissions may be the subject of copyright protection in the jurisdiction of reception or both.[34] This has been held to apply, notwithstanding the existence of intervals between the reception of the broadcast waves, provided the performances were public and for profit.[35]

Serving as a catalyst for the emergence of broadcasters common law copyright protection was the case of *RCA Manufacturing Co. v.*

---

that the copyright monopoly is a necessary condition to the full realization of such creative activities."

[29] 17 U.S.C., §§§ 1 (c), 1 (d), and 1 (e) (1964).

[30] National Telegraph News Co. v. Western Union Telegraph Co., 119 Fed. 294 (7th Cir. 1902).

[31] 206 F. 2d. 199 (1st Cir. 1953).

[32] 209 U.S. 1, 17 (1908).

[33] Fox, "Some Points of Interest in the Law of Copyright," *University of Toronto Law Journal,* Vol. 6 (1945), pp. 100, 130-134; see also Hearings on H.R. 2512 concerning copyright law revision before Subcommittee No. 3 of the House Committee on the Judiciary, 90th Cong. 1st Sess. 3611 (1967). (Hereinafter cited as Hearings on H.R. 2512).

[34] Fox, *supra* note 33.

[35] Buck v. Jewell-LaSalle, 57 F. 2d. 726 (1931). "The transmitted radio waves require a receiving set for their detection and translation into audible waves, just as the record requires another mechanism for the reproduction of recorded components. Reproduction in book cases amounts to a performance." Buck v. Duncan, 32 F. 2d. 366 (W.D. Mo. 1929).

Whiteman.[36] Concerning a radio broadcast intercepted in New York and rediffused in Pennsylvania, it was held that a broadcast from New York received in Pennsylvania might give rise to copyright infringement under Pennsylvania law.[37] In describing the artist's right to the reproduction of his performance the New York District Court said that "the power to reproduce the exact quality and sequence of sounds has become possible and the right to do so, exceedingly valuable."[38] However, Learned Hand, speaking for the court, denied relief on the grounds that common law performance rights ended with the sale of records.[39] Under this view any ensuing rights to sound tracks performed over radio and television subsequent to such a sale would receive no protection, but would be considered released forever to the public domain.

This very narrow doctrine of publication of performance by the first sale was discarded, however, in *Metropolitan Opera Co. v. Wagner-Nichols R. Corp.* and *Capitol Records Inc. v. Mercury Records Corp.* which held that the mere sale of the records did not constitute such publication as to release any live performance rights[40] or the right to record.[41]

Not withstanding any international convention revision, the *Metropolitan* and *Capitol* cases might still gain recognition in the global community as prevailing standards for performers' rights.

However, as the right to perform, including the right to record, is protected by Section 1 (c) of the U.S. Act,[42] consideration will need to be given to the scope of performance rights under present reassessment, including the right to multiple performances in public.[43]

Status of United States Revision Proposals for 1968

Under the U.S. Copyright Act of 1909, the right to perform, including the right to record such performances, is protected by

[36] 114 F. 2d. 86 (2d. Cir. 1940).

[37] *Id.*

[38] *Id.*

[39] *Id.*

[40] 199 Misc. 786, 101 N.Y.S. 2d. 483 (Sup. Ct. 1950).

[41] 221 F. 2d. 657 (2d. Cir. 1955). However, inasmuch as the Capitol court simply overruled the Metropolitan court's distinction between live performance rights and the right to record, "the exclusive right to make and sell records" is not necessarily a compelling extension of "the exclusive right to broadcast its performances" which the Capitol court felt was required. At least one authority takes this view; see Nimmer, *supra* note 28 at § 51.2.

[42] 17 U.S.C. § 1 (c) (1964).

[43] *Id.* ". . . and to play or perform it in public for profit" seems to grant express rights to record; see also Nimmer, *supra* note 28 § 107.41 at 407.

Section 1 (c) of the Act.[44] With the exception of musical recordings of copyright performance rights under Section 12 of the Act which are subject to compusory license pursuant to Section 1(e) upon recording, performance societies such as ASCAP and BMI generally license motion picture producers and television broadcasters for exclusive use, ranging from blanket licenses for non-dramatic performances for profit to individual synchronization licenses.[45] To include the performance in a movie or television special, producers must obtain both exhibition and synchronization licenses. This is called licensing at the source.

However, under Section 110 of the present House bill, all television and motion picture works, though capable of being separately performed, would appear to be included under a combined protective right of "autio-visual works."[46]

Multiple Performances

Early disputes arose as to whether an artist was entitled to protection against subsequent multiple performances in public.[47] Although it has long been granted for literary works,[48] the 1967 House proposal exempted certain secondary transmissions, including non-profit booster and translator systems, instructional retransmissions and passive carriers who have no control over program or selection of the recipients of the secondary transmission.[49] Thus, a mere passive receiver which serves only as a channel for redirecting the frequency waves, might have been considered exempt from infringement liability under the United States Act, unless other actionable factors enumerated in Sec. 111 (b) of the House Report could be found.[50] Although Section 111 was

---

[44] 17 U.S.C. § 1 (c) (1964).

[45] Nimmer, *supra* note 28 § 107.6 at 417.

[46] See H.R. 2512, sec. 110, 90th Cong. 1st Sess. (Jud. Comm. 1967) Hereinafter cited as H.R. 2512. This construction is discussed further by Mr. Celler in the Hearings on H.R. 2512, *supra* note 33 at 3613.

[47] See Buck v. Jewell-LaSalle, 283 U.S. 191 (1931); Society of European Stage Authors and Composers, Inc. v. New York Hotel Statler, Inc., 19 F. Supp. 1 (S.D.N.Y. 1937).

[48] Nimmer, *supra* note 28 § 107.4 at 414.

[49] H.R. Rep. No. 83, § 111 (a), 90th Cong. 1st Sess. (1967), p. 6.

[50] *Id.*, § 111 (b). Secondary transmissions, fully actionable included instances where the program retransmitter: (1) alters program content; (2) originates programs; (3) charges for particular transmissions; (4) picks up primary transmissions not intended for reception by the public at large; (5) operates outside the primary transmitter's normal area and has not recorded his identity with the Copyright Office; (6) operates outside the primary transmitter's normal area adequately served by other primary transmitters or operates in an area known to be covered by an exclusive license to another transmitter.

deleted from the final House bill, there is still the distinct possibility that the Senate will adopt a similar provision in its final bill. Should this occur, certain exceptions seem likely to arise with respect to non-profit state financed satellites, retransmitting in broadly defined normal areas of the primary transmitter, in which case only reasonable license fees would be recoverable.[51]

A further problem of potential significance, not covered in the House Report, relates to certain jurisdictional limitations in bringing suit for copyright infringement. Although direct or synchronous satellites transmit directly to receiving stations, without the need for a middle relay facility, distribution satellites require the strengthening of their signals, either by intermediary local relay stations or through a series of satellites, before they can be rebroadcast to home receivers.[52] As the principle is still generally held that a copyright holder must prove publication within the foreign jurisdiction, in the absence of a reciprocal treaty relationship,[53] rediffusers of distributive broadcasts might contend the non-focused transmissions to be lost in the public domain of space, subject only to being reclaimed by renewed distribution. Thus, it is vital that a common system of redress for copyright performance rights in this important telecommunications medium be established.

Deletion of "Profit" Exception

Under the amended version of the 1967 House bill,[54] non-profit educational broadcasting was deleted from proposed exemptions. This is a substantial departure from previous revision hearings, which generally exempted religious and educational users, on the grounds that their service to the public outweighed the interest of securing copyright monopolies and that they would normally not be expected to incur financial gain.[55] Thus, in the absence of a subsequent reinstatement by the Senate of non-profit exemptions, fair use will survive as the only available defense for non-profit users.[56] However,

---

[51] *Id.*

[52] Doyle, *supra* note 22 at 445; see also Behr, "Relay by Communication Satellites: A Special Situation in Copyright Infringement Liability," *Journal of Air Law and Communications,* Vol. 31 (1965), pp. 311, 314.

[53] Domestic Communication Satellites, 5 F.C.C. 2d. 354 (1966). Distribution satellites, on the other hand, would require about 40 satellites at an altitude of about 2,000 miles in order to cover the earth's surface. Behr, *op. cit. supra* note 52 at 314.

[54] See *Congressional Record,* Vol. 113, pp. 38, 63-65.

[55] Copyright Law Review, 86th Cong. 2d. Sess. (Jud. Comm. 1960), pp. 111-115.

[56] See H.R. 2512 § 107, *supra* note 46. For a detailed analysis of § 107 see H.R. Rep. No. 83, 90th Cong. 1st Sess. 19-37 (1967).

insofar as this defense is circumscribed by public policy, guidelines of good faith and fair dealing, it has not and should not be distilled by narrow legislative criteria.[57] Consideration of material use, motivations of commercial gain, and the competitive effects upon the copyright holder's work seem to underlie present proposals[58] and will predictably continue to govern judicial decision on fair use.[59] This apparent shift from "profit" to a more general fair use standard is designed to enable educational broadcasters and copyright holders to negotiate clearances in a manner accommodating to both.[60] To the extent the exception will exclude state financed satellite operations which incur indirect profits to the foreign government, it would appear to offer a more realistic base for future negotiations.

A Comparative View of Soviet Copyright Protection

Creative artists of both published and unpublished works are granted rather liberal protection under the Soviet Copyright Act.[61] As the Soviet Act requires only that the author's creative product be "available in some presentable form," works of perception as well as reproduction are also included.[62] The 1961 revisions make reference to: "manuscripts, drawings, images, public recitals or performances, films, mechanical or magnetic recordings"[63] while excluding certain enumerated items in the 1928 Soviet Statute.[64]

Thus, in the absence of a Soviet reluctance to adhere to a reasonable

---

[57] Nimmer, *supra* note 28 § 145; Shulman, "Fair Use and the Revision of the Copyright Act," *Iowa Law Review,* Vol. 53 (1968), p. 832.

[58] Copyright Law Rev., 86th Cong. 2d. Sess. (Jud. Comm. 1960), pp. 14-15.

[59] Shapiro, Bernstein & Co. v. P. F. Collier & Son Co., 26 *USPQ* 40, 43 (S.D.N.Y. 1934).

[60] See Hearings on S. 597 Before the Subcommittee on Patents, Trademarks, and Copyrights of the Senate Comm. on the Judiciary, 90th Cong. 1st Sess. (1967). pt. 1 at 213-36, pt. 3 989-1041. Hereinafter cited as S. 597.

[61] Fundamental Principles of Soviet Civil Legislation, translated in UNESCO, *Copyright Laws and Treaties of the World* (Supp. 1962). Hereinafter cited as UNESCO. Although royalties are granted through the auspices of the State rather than private publishers and broadcaster licensors. Gsovski, *Soviet Civil Law* 401 (1948). In turn, the amount of royalties allowed "depends upon the value of the work for the Socialist society." Levitsky, "The Soviet Press and Copyright Legislation," *Fordham Law Review,* Vol. 25 (1956), pp. 469, 480. For a general discussion of Soviet-copyright extension, see Hazard, *Law and Social Change in the U.S.S.R.* (1953), pp. 187-211.

[62] Ioffe and Tolstoi, *Basic Principles of Soviet Civil Legislation* (1962), p. 133.

[63] A. Vaksberg, "From the Standpoint of Practice," *Sovetskoye Gosudarstvo,* Vol. 3. 96, 99 (1961), pp. 96, 99, translated by Wolfmann in "Author and the State," *ASCAP,* Vol. 11 (1964), p. 18.

[64] *Id.*

statutory construction of its Act, the Soviet statute, like the present United States Act and House revision proposals, can be construed to cover performances transmitted by satellite. However, the Soviet Union has placed significant limits on the application of its Act. According to Article 97 of the 1961 Act:

> Copyright to works first published on the territory of the U.S.S.R. or unpublished but located within the territory of the U.S.S.R. in some presentable form, shall be recognized as belonging to the author and his successors in law, regardless of their citizenship.[65]

To date, copyright protection to foreign works of non-Soviet citizens is recognized only by international agreement,[66] of which the Soviet Union has demonstrated great reluctance to bind themselves.[67] Combined with the implied territorial limitations of copyright protection from Article 97, it is apparent that basic policy changes must occur in the Soviet position if copyright protection is to develop coextensively with expanding satellite operations.

Scope of Protection Granted by Other Potential Satellite Developers

Generally, foreign countries have expressed a willingness to grant protection to foreigners only if their citizens receive reciprocal protection.

Probably the broadest and most liberal protection to performers is extended by France. Under the legislation, the performer has the right of authorizing his work to be broadcast publicly by any wireless means and includes all subsequent communications or multiple performances.[68] Most significant is the fact that France grants protection to the works of all foreigners, irrespective of any reciprocation.[69]

The German Federal Republic protects the right of an artist to publicly perform a musical or dramatic work, and communicate it "by a wireless broadcast such as a radio or television transmission, or by wire or by other analogous devices.[70] The Act is consistent with the

---

[65] Soviet Civil Legislation and Procedure translated in UNESCO, *supra* note 61. For the effect of these limitations on secondary publishing in the Soviet Union, see Colino, "Copyright Protection Abroad for United States Cultural Exports," *Duke Law Journal* (1962), pp. 219, 237-238.

[66] *Id.*

[67] Cramer, "International Copyright and the Soviet Union," *Duke Law Journal* (1965), pp. 531, 539.

[68] Copyright Act of France, Art. 45 in UNESCO, *supra* note 61.

[69] See Law No. 57-296 of March 11, 1957 at 2723.

[70] Copyright Act of German Federal Republic, Art. 19(2) in UNESCO, *supra* note 61.

present U.S. Act in limiting protection to public performances for profit.[71] It is evident, however, that Germany provides no foreign protection by statute,[72] although it is a member of the Universal Copyright and Berne Conventions and has made numerous bilateral treaties, including the United States, extending protection to works first published in another country.[73]

The United Kingdom extends protection to foreign published works to both co-parties of a convention such as the U.C.C. and on a bilateral basis to countries whose laws likewise give adequate protection of British authors and performers.[74] On the other hand, she may restrict protection "if it appears to Her Majesty that the laws of a country fail to give adequate protection to British works."[75] Pursuant to Item 7 (a) (1) (a) of the Act, the United Kingdom extends synchronous as well as exhibition rights from a dramatic musical performance, thereby creating a basis for uniform package licensing arrangements from broadcasters possessing exhibition rights to satellite broadcasts.[76] The British Act then appears to provide a flexible framework for future reciprocal copyright arrangements with the United States. Furthermore, the Act as amended in 1963 provides protection in sub-section 8 (1) for "performances of a dramatic or musical work" rendered or intended to be rendered by mechanical or electrical means,[77] and in sub-section 8 (2) for "anything done in relation to a performance, notwithstanding that the performance, took place out of the United Kingdom."[78] Any contention that sub-sections 8 (1) and 8 (2) should be read exclusive of a grant of multiple performances, is dispelled by an amendment to Section 31 of the Act which extends copyright protection to all classes of persons authorized to broadcast to the public in any country in which lawful broadcasts

---

[71] According to the revised act of 1965, face to face public communications of previously published works are exempted if it results in no gain to the organizer, if spectators are admitted free of charge, and if the performers receive no remuneration. See Copyright Act of Sept. 9, 1965, Art. 52 (1) (1965). Bundesgestzblatt, ser. 1, at 1273 (Ger.).

[72] See German Law of June 19, 1901 as amended by the laws of May 22, 1910 and Dec. 13, 1934.

[73] Copyright Law Review 86 Cong. 2d. Sess. (1961).

[74] United Kingdom Copyright Act, 1956, 465 Eliz. 2, Ch. 74, § 32, in UNESCO, *supra* note 61.

[75] *Id.* § 35.

[76] United Kingdom Dramatic and Musical Protection Act 1958, Item 7a (1) (a) in UNESCO, *supra* note 61.

[77] United Kingdom Dramatic and Musical Protection Act 1963, as amended and supplemented July 31, 1963, 6 & 7 Eliz. 2, Ch. 53, in UNESCO, *supra* note 61.

[78] *Id.*

meeting the requirements of Section 14 emanate.[79] The combined effect of these provisions is a sufficiently broad set of standards so as to allow for the constructive inclusion of satellite performance rights, originating outside the United Kingdom.

From an examination of the copyright statutes of a group of other industrial countries, one finds a mixture of broad and restrictive provisions of protection to foreign performers of international broadcasts.[80]

In assessing the statutes of present and potential satellite users, there is an array of disagreement over both substantive standards and limitations on classes of persons to be protected. In view of the importance and interdependence of satellite communication, and recognizing the pressures and political uncertainties of bilateral negotiations, it is vital that the U.C.C. and Berne Union be modified to achieve uniform performance rights for satellite coverage. National legislation in this area should then be revised to complement convention changes.

Assessment of Analogous Problems of CATV in Present United States Copyright Revision Proposals

A very controversial issue arising from the much publicized CATV activities and which promises to be a very ticklish discussion topic in future communication satellite rules consideration, is whether television programs are protected by Section 1 (d) performance rights of

---

[79] Copyright (Broadcasting Organization Order, 1961), published in Statutory Instruments of 1961, No. 2460.

The provision of § 14, specifying lawful television broadcasts under the Act, gives extended application to performances emanating from countries which are members of the U.C.C. and the Berne Union. Copyright Act of 1956, United Kingdom: Item 8, Copyright (Int. Con.) Order 1964, as amended 1966, Part II, par. 8 in UNESCO, *supra* note 61.

[80] Sweden and Canada, while granting protection to profitable public performances exempt public performances in furtherance of religions, educational, or charitable objects in which the performer receives no payment. See Copyright Act of Dec. 30, 1960, Art. 20 (1960). Swensk Forfattningssamling 1949 (Swed.) and Copyright Act, Can. Rev. Stat. C. 55, § 17 (3) (1952), respectively.

Belgium grants public performance rights (Art. 16) equally to foreigners to the extent nationals enjoy reciprocal rights in the foreign country (Art. 38). See Belgium Copyright Act in UNESCO, *supra* note 61.

Italy grants liberal performance rights for "productions capable of publication by any system of reproduction at present known or hereafter invented." (Art. I), while limiting such rights to foreigners to the extent granted members in the U.C.C. and Berne Union (Art. 186). See Copyright Act of Italy in UNESCO, *supra* note 61.

dramatical works. So long as the television pictures are dramatical images, they have been interpreted as deriving full protection from Section 1 (d).[81] However, this leaves unprotected the various documentary films and news telecasts.[82] As these films are not classified as literary publications as defined by Section 1 (c), only Section 1 (e) performance rights with compulsory license provisions would remain. With the emergence of motion pictures and television on a large scale, it would appear that some copyright revision may be necessary to include such documentary works under the protective mantle of Section 1 (c) non-dramatic literary rights.

Another dilemma arises with respect to the use of recorded sound tracks in motion pictures and television series and specials. Should compulsory license provisions apply to the sound track, apart from the synchronous rights intended to the dramatic performance as a whole? Although several decisions have intimated that motion picture sound tracks fall within Section 1 (e) compulsory license,[83] the more considered view is that sound tracks are integral parts of the motion picture or television special.[84] However, in the absence of agreement among satellite participants, this is bound to create problems in satellite licensing negotiations.

Thus, in approaching the problems posed with respect to a global system of copyright remedies for communication satellites, care must be taken to balance the essential and potentially conflicting interests that undergird copyright protection of performers' rights. As Lord Mansfield admonished in the early case of *Sayre v. Moore*:

> We must take care to guard against two extremes equally prejudicial; the one that men of ability, who have employed their time for the service of the community, may not be deprived of . . . their just merits and the reward of their ingenuity and labour; the other that the world may not be deprived of improvements nor the progress of the arts retarded.[85]

Assessment of the plethora of factors which effect the expansion of copyright remedies in outer space, must then be made with just this candid accommodation of special interests and values. As many of these same problems are raised in the very controversial subject of

---

[81] Nimmer, *supra* note 28 §109.4 at 437.

[82] See Tiffany Prod. v. Dewing, 50 F. 2d. 911 (D.C. Md. 1931); Metro Goldwyn Mayer Distr. Corp. v. Wyatt, 21 C.O. Bul. 203 (D.C. Md. 1932).

[83] See Famous Music Corp. v. Melz., 28 F. Supp. 767 (W.D. La. 1939); Foreign and Domestic Music Corp. v. Licht, 196 F. 2d. 627 (2d. cir. 1952).

[84] *Supra* note 28 § 109.5 at 441.

[85] Eng. Rep. 139, 140 (1785).

Community Antenna Television, an analogy of approaches to CATV to that of Communication Satellites should prove quite valuable.

Community antenna television systems were developed to serve as booster stations to bring television broadcasts to otherwise unreachable homes. They operate essentially through the use of a central antenna which receives the signals broadcast from a regular television transmitter, amplifies them, and transmits them via cable to the subscriber's television set. The House Judiciary Committee, during recent copyright revision hearings, described CATV systems as follows:

> In general, community antenna systems are commercial subscription services that pick up broadcasts of programs originated by others and retransmit them to paying subscribers.[86]

The rapid development of CATV has, however, created deep concern among local broadcasters who fear that much of their visual audience potential will be lost to this new creation of technolgical ingenuity and among copyright owners who anticipate the loss of many local stations for the licensing of their works.[87]

Although infringement remedies run afoul under the theory of copies protected by Section 1 (a) of the Copyright Act by reason of the Supreme Court's decision in *White-Smith Music Pub. Co. v. Apollo Co.*,[88] they have been given some security under performance rights protection extended in Sections 1 (c) and 1 (d) of the Act. In *United States Television Inc. v. Fortnightly Corp.*,[89] the Court found the "essential feature" of CATV's operations to be that when it received the signals from the TV station and fed them into the amplifying equipment which formed a part of its transmission system, it "created output signals which are replicas in electronic terms of input signals," and which are conveyed to its subscribers on new carrier waves.[90] Such duplication and reproduction "on newly supplied energy the patterns, arrangements, configurations, variations and sequences of energy that originated from the broadcast antenna" constituted copyright infringement according to the court.[91]

---

[86] See H.R. Rep. No. 2237, 89th Cong. 2d. Sess. 77, 78 (Oct. 12, 1966), H.R. Rep. No. 83, 90th Cong. 1st. Sess. at 48, 49 (March 8, 1967).

[87] Intermountain Broadcasting & Television Corp. v. Idaho Microwave Inc., 196 F. Supp. 315 (D. Idaho 1961).

[88] 209 U.S. 1 (1908).

[89] 255 F. Supp. 177 (S.D.N.Y. 1966), aff'd. 377 F. 2d. 872.

[90] *Id.* at 192.

[91] *Id.* However, in view of the Supreme Court's recent reversal of the 2nd Circuits ruling, holding that as CATV systems did not perform within the meaning of sec. 1 (c), there was no infringement, new definitions of CATV as a performance mechanism are plainly called for. See 392 U.S. 390 (1968) for the text of the United Artists decision.

There are concededly questionable features of the decision's extension of copyright infringement to CATV, particularly in areas where the broadcaster is unable to produce a visible and audible representation to the work. The court seems to resolve this apparent inconsistency by construing the CATV station as having aided the visible or audible rendition, and thereby infringed in the absence of a license to do so.[92]

For the future, as all the rediffusion systems perform essentially the same economic and social functions as vehicles for conveyance of public performances, important policy consideration should serve as criteria in guiding the courts in copyright infringement actions in CATV and its evolving offspring, communication satellite systems.[93]

Policy Considerations for the Imposition of Restraints on CATV

The *United Artists* decision relied on the broad construction of public performance for infringement as required in Sections 1 (c) and 1 (d) of the Act which was adopted in the *Jewell-LaSalle* case.[94] The *United Artists* decision seems to be built on the supposition that CATV's rediffusion activities were interfering with the exclusive licensed range of broadcast given to networks and thus denying copyright holders substantial profits they might otherwise have obtained.

Anti-Competitive Effects

Taking the premise that the purpose of the Act in conferring the copyright monopoly is to maximize the public benefits from the creation and dissemination of artistic and intellectual works,[95] limitations placed on CATV would tend to subvert the public's equality of opportunity to receive radio and TV broadcasts.[96]

However, the limitation on public television reception argument and the corresponding outgrowth of related industries serving CATV, is not without its flipside.[97]

Public policy also favors the creation and preservation of local

---

[92] Dorchester Music Corp. v. NBC, 5F. 2d. 411 (6th Cir.).

[93] "Note, CATV and Copyright Liability," *Harvard Law Review,* Vol. 80 (1967), pp. 1515, 1519.

[94] *Supra* note 35.

[95] Fox Film Corp. v. Doyal, 286 U.S. 123 (1932).

[96] Hearings on H.R. 2512, *op. cit. supra* note 46 at 3625. See also Smith, "CATV —A Tainted Virgin," *Federal Bar Association Journal,* Vol. 27 (1967), pp. 451, 458.

[97] Meyer, "The Nine Myths of CATV," *Federal Bar Association,* Vol. 27 (1967) pp. 431, 437.

television stations which could not cope with competitors who sell the same programs as the stations, except that unlike the stations, they refuse to pay for them.[98]

More important, even if the expansion of booster stations is in the public interest of maximizing the benefits of communication, copyright owners deem it patently unfair to be asked to forego copyright royalties as a means of subsidizing CATV and their viewers.[99]

The very complexities and expense that infuse program broadcasting, then, demonstrate the futility of relying on any one simplistic theory that takes account of one set of interests at the expense of the other.

On the other hand, to require payment of further royalties by CATV operators might constitute a double reward, unless the license to broadcasters was based on a provision allowing the networks to sublicense CATV operators.

Effect on Markets

Inasmuch as licensing fees to copyright holders reflect the size of the audience that the program is expected to reach, there is a question as to whether there is any copyright infringement at all when CATV retransmits television signals to areas otherwise non-accessible by the licensed network.[100] In such a case, CATV operators contend that the network will often be willing to pay a higher rate to the copyright holder knowing he will be willing to extend program advertising and television time into remote areas, where only CATV can reach these distant audiences.[101]

However, where the sponsoring commerical is of a local nature, advertisers presumably would be unwilling to pay more to the network for advertising extension into areas of non-potential customers, or for programs to be disseminated in areas already released by CATV.[102] The revenue of sponsors will, of course, effect the royalties networks are willing to pay to copyright owners.

---

[98] F.C.C. First R & O on Microwave Relays, 30 F.C.C. 683, par. 46. 75 (1966); F.C.C. Second R & O on CATV Systems, 7 F.C.C. 2d. 755, par. 137 (1966).

[99] Hearings on S. 1006, concerning copyright law revision before the Senate Committee on the Judiciary, 89th Cong. 2d. Sess. 205-210 and 227-230 (1966). Refuting any notion that CATV operators are nothing more than local community service groups is the finding that CATV annually takes in $150 million. Hearings on H.R. 2512, *supra* note 46 at 3880.

[100] United Artists Television, Inc. v. Fortnightly, *supra* note 88.

[101] Hearings on H.R. 12914, 89th Cong. 2d. Sess. (1966), pp. 659-660. Statement by Mrs. Dorothy Mangford, CATV liaison of stations CDAU and WNAP, Scranton and Wilkes-Barre, Pa.

[102] *Supra* note 97 at 438.

The effect on copyright royalties will probably vary according to the shifts in audience advertising allocation between stations and the balancing of increased royalties from the network over the lost revenue from CATV.[103] Because of the difficulty in assessing the impact on extended advertising, it might be best to vest decisions on the marketing of programs and commercials in the program owners and advertisers keeping in mind that, where CATV stations reinforce program transmission by serving remote non-competitive areas, the public interest should probably prevail over copyright holders and network broadcasters claims of interference with exclusive licenses.[104]

Effect on CATV Access to Licensing Negotiation

CATV operators contend that because of the complexity of their operations together with their remote location, their small size, their inability to obtain information as to what programs would be telecast by the stations which they retransmit, who the copyright owners are, and the great number of copyright owners requiring licenses, would make the clearance of copyright licenses an economic impossibility.[105]

Most CATV systems today, however, are highly integrated operations with extensive marketing staffs. Moreover, performing societies such as ASCAP and BMI, through the use of blanket license and sophisticated information systems, have rendered clearances between copyright owners and program buyers of the broadcasting stations almost routine.[106] As Arthur Krim stated in his testimony before Subcommittee No. 3 of the House Judiciary Committee:

> CATV systems will be given all the notice they need and appropriate arrangements can be made for entering into licensing agreements for any programs they wish to transmit.[107]

Effects of CATV Copyright Owners' Rights to Transmit

CATV owners argue that their retransmission within the area of the copyright holders grant of exclusive license does not reduce the size of his market.

However, as the F.C.C. stated in its First Report and Order, 30 F.C.C. 683 (1966) at par. 58:

---

[103] *Supra* note 93 at 1524.

[104] Hearings on S. 1006, *supra* note 99 at 211-219.

[105] Hearings on H.R. 4347, H.R. 5680, H.R. 6831, and H.R. 6834 concerning copyright law revision before Subcommittee No. 3 of the House Committee on the Judiciary, 89th Cong. 1st Sess. 1297 (1965).

[106] *Id.*

[107] *Id.*

> This exclusivity reflects, among other things, the judgment that duplication of the program within the station's markets—either simultaneously or within some period of time—reduces the audience and the value of the program to the station.[108]

This right to exclusivity is based on the view that CATV, whether passive or active, should be required to pay their full share of the value of performance rights. This claim if accepted would effectively reject contentions of CATV that copyright holders are not entitled to double payment. CATV commercial operations for profit simply differ from local community ventures by subscribers to increase reception.[109]

Effect of CATV Copyright Liability on Attempts to Regulate Communication

In extending copyright liability to CATV operators for interference with network broadcasting licenses, judicial impositions would be created at the expense of the public being compelled to bear the financial burdens of what has been heretofore conveyed to TV viewers free of charge. Such a policy, allegedly interferes with the F.C.C.'s power of regulating television programming.[110]

Thus, just as U.S. copyright revision proposals attempt to accommodate copyright protection with the public interest in uniform frequency allocation by the F.C.C., by allowing some retransmission by CATV when distributed into areas not accessible by local stations,[111] proposals to provide adequate protection to copyright owners in communication satellite transmission should also embrace the composite interests of the international community.

Space Communication—An Extension of CATV

The question to be posed is whether the legal characteristics and consequences of communication satellites should vary from the pattern

---

[108] *Supra* note 98 at par. 53.

[109] "Comment, CATV and Copyright Law: End of the Honeymoon," *Kansas Law Review,* Vol. 15 (1967), pp. 325, 340.

[110] Southwestern Cable Co. v. F.C.C., 378 F. 2d. 118 (1967). The court held that the F.C.C.'s power to issue cease and desist orders to CATV operators was limited to licenses. Thus, any copyright conflict with F.C.C. regulations would appear to be limited to cases of licensed CATV operators.

[111] H.R. 2512, *supra* note 46 § 111, accompanied by H.R. Rep. No. 83, 90th Cong. 1st Sess. (1967). However, as § 111 was deleted in the final bill, in the absence of further revisions that would reinstate certain qualified educational uses, CATV stations will be exempted only by a show of fair use. Hearings on H.R. 2512, *supra* note 46 at 3645.

of CATV. If satellite communications are considered in the context of relay stations for the rediffusion of message signals between points, requiring transmitting and receiving stations for effective communication as in CATV, then the legal patterns do not appear dissimilar. The only real substantive difference, is that satellite relays require international agreement on the use of broadcast frequencies, as opposed to the uniform U.S. copyright provisions judicially construed by U.S. courts.

There is a growing awareness, though, of a need for nations to agree to rules and remedial institutions for resolving copyright problems arising from the interception of beamed satellite programs.[112]

These rules and processes for resolving space disputes need not break with the policies underlying CATV infringement protection. This view at least draws general support from Myres McDougall who states:

> The specific types of controversies, requiring clarification of the content of future prescription, which can be expected to arise over agreements between enterprisory organizations and other participants in earth-space social processes are likely to parallel those which have hitherto arisen with respect to comparable agreements about earth activities.[113]

To achieve at least a modicum of specificity in this newly reached global plateau of radio and television entertainment, proposals for a new set of copyright rules and remedies should be made after very careful consideration of the similar problems posed in the close counterpart—CATV. To so suggest, though, is not to sanction an unlimited extension of analogies. Justice Frankfurter carefully reminds us that, "One of the most treacherous tendencies in legal reasoning is the transfer of generalizations developed for one set of situations to seemingly analogous, yet essentially very different situations."[114]

Prior to the *United Artists v. Fortnightly* decision in 1965, confirming copyright protection against CATV exploitation, legislative hearings were begun in the 89th Congress. Initial proposals precluded any retransmission of non-authorized copyrighted programs.[115] How-

---

[112] See Johnson, "The Freedom of Outer Space," *op. cit. supra* note 10; see also Johnson, "Satellite Communication: The Challenge and the Opportunity for International Cooperation," *supra* note 2.

[113] McDougall, Lasswell, and Vlasic, *Law and Public Order in Space* (1962), p. 961.

[114] Braniff Airways v. Nebraska Board, 347 U.S. 590 (1954).

[115] H.R. 4347 and S. 1006, 89th Cong. (1965).

ever, in 1966, almost paralleling the *United Artists* decision, a proposal to separate CATV retransmissions into three categories was discussed in length both in the House and Senate Judiciary Committees.[116] In area number one, referred to as the black area, which included those areas adequately served by local stations, importing CATV programs from other distant stations were subject to copyright coverage, provided adequate notice was given to the CATV operator.[117]

In area number two, the white area, deemed to be encompassed by the transmitting television station's scope of coverage, but inadequately spread, CATV systems, serving as boosters, were exempted from copyright coverage.[118]

Finally, in area number three, designated as the grey area, which was without adequate coverage, CATV systems were to be given retransmission rights by means of compulsory licenses upon payment of reasonable royalties.[119] These royalties might be set by the parties, in the case of failure to agree by a court or arbitration body.[120]

However, as Section 111 of the presently proposed copyright revision bill, has been deleted from the House bill, with the Senate still uncertain, further considerations will need to be made by both Houses to resolve the present areas of controversy over CATV operations.

In considering the above proposals in future discussions of the Universal Copyright and Berne Conventions and in arbitration and judicial hearings of international copyright infringement by satellite, heavy emphasis should be placed on the extent of intended coverage, the adequacy of exclusive coverage within the perimeter of focus, the value of advertising extended by the infringing satellite, the deleterious effects upon copyright owners' negotiations of royalties in the presence of imminent infringement, the justification for compulsory licensing to foreign satellites designed to supplement the noncompeting originator's audience, and the means for agreeing on reasonable compensation for the licensing of performance rights to retransmitting satellites.

---

116 H.R. 2512, *supra* note 46, and S. 597, 90th Cong. 1st Sess. (1967).

117 See H.R. Rep. No. 2237, 89th Cong. 2d. Sess. 87 (1966).

118 *Id.*

119 *Id.*

120 *Id.* What a CATV operator is willing to pay will probably, like local stations "depend in large part on whether the copyright owner can guarantee exclusivity within the station's area of coverage."

NEEDED EFFORTS TO STANDARDIZED COPYRIGHT PROTECTION

In the presence of the Soviet Union's competing satellite system, it is especially important that revisionary proposals for both the Universal Copyright and Berne Conventions be assessed with a view to inducing Soviet participation. Certain protective requirements of an effective global system, simply cannot be worked out effectively without the combined efforts of all the major satellite users.

Numerous negotiations in the past with the Soviet Union to extend legal protection to foreign copyright owners, have failed.[121] The Soviets have given two principal reasons:

> (1) their concern over international copyright as merely another manifestation of capitalist exploitation,[122] and
> (2) their considered feeling that there is presently a disproportionate interest in foreign works as compared to foreign interest, especially Soviet, in the works of United States and leading European countries.[123]

It is clear though that if the full benefit of satellite communications is to be enjoyed by all interested countries, some assurance of the respect for copyrights must be made available to satellite members, their private satellite carriers, broadcasters, and performers by the allocation and securance of frequency channels. This may require extra legal policy considerations by ComSat, INTELSAT, and other regional systems as they develop, to foster and preserve competition amongst carriers on an international basis, in the furnishing and purchasing of equipment and apparatus[124] and to insure the performers fair compensation for their efforts.

Prospects of Accommodating Satellite Protection Within the Present Structure of the Universal Copyright Convention

In assessing the U.C.C., technical difficulties in confining satellite broadcasts to a given legal jurisdiction will need to be taken into account, inasmuch as the authorized presentation of copyrighted works in one jurisdiction, under Article VI may preclude infringement

---

121 Cramer, *supra* note 67.

122 Berman, "Rights of Foreign Authors Under Soviet Law," *Bulletin of the Copyright Society of the U.S.A.*, Vol. 7 (1959), pp. 67, 80, 81.

123 Friedberg, *Literary Outlook: 1956-1962 in Soviet Literature in the Sixties* (Hayward C. Crowley eds. 1964), pp. 158, 160; see also *New York Times*, 10/27/64, p. 44, col. 1.

124 Communications Satellite Act, § 102 (c) and 201 (c) (1) (1962), *supra* note 1.

actions in another jurisdiction.[125] At the same time, as the provision contains no "public performance for profit" qualification and in view of the broad language of "visually perceived," it would seem to offer adequate performance rights to dramatical and non-dramatical works against interception and exploitation by other state owned satellites.[126]

Second, to ensure the broadest latitude among the contracting states to negotiate special qualifications and protections not specified in the Convention, Article XIX of the U.C.C. provides that:

> This Convention shall not abrogate multilateral or bilateral conventions or arrangements in effect between two or more Contracting States.[127]

This provision will become especially crucial should the Soviet Union and other non-member satellite powers accede to the Convention, for in the event interpretive extensions of Article VI and subsequent revision proposals of the Convention fail to embrace satellite coverage of programming, the United States and the respective countries could still conclude bilateral arrangements. This would be consistent with Sec. 9 (b) of the United States Act which provides for Presidential proclamation to extend additional copyright to a foreign country that "is a party to an international agreement which provides for reciprocity in the granting of copyright," by the terms of which agreement the United States may at its pleasure, become a party thereto [open convention].[128]

In revision proposals of our own act, however, there does not appear to be any justification for the qualification of "open convention," so long as reciprocal treatment is provided.[129] Such a qualification can only be detrimental to future negotiations with the Soviet Union should it become a member of a closed convention for Communist countries.

Third, inasmuch as the U.C.C.'s performance-publication effect in Article VI might result in dedication to the public in another jurisdiction of transmission, unlike the Berne Union,[130] revision may be

---

[125] U.C.C., Art. VI in UNESCO, *supra* note 61.

[126] *Id.*

[127] *Id.*

[128] 17 U.S.C. § 9 (b) (1964).

[129] See Copyright Law Rev., 86th Cong. 2d. Sess. (Jud. Comm. 1961) at 10.

[130] Public performances under the Berne Union do not constitute publication and therefore create no territorial limitations on the granting of performance rights for broadcasting. Berne Convention, Art. 4 (4) in UNESCO. This rule is supported in the United States under Capitol Records, Inc. v. Mercury Records,

necessary to extend Article VI to include publication rights in any other country transmitted, subject only to non-profit or fair use exceptions to certain classes of transmissions.

United States Accession to the Berne Union

The Berne Union, created in 1886, has long been one of the most successful ventures in world law. However, to date the United States has not acceded to the Union. As present United States revision proposals closely follow revision proposals of the Berne Union, it may be particularly appropriate for the United States to reconsider the possibility of acceding to the Union. Such accession would allow further opportunity to broaden the assessment of uniform copyright revisions covering communication satellite broadcasting infringement.[131]

Concerning broadcasts relayed across national borders by satellite, the question arises as to whether a transmission which originates in nation A but is received on radio or television sets in nation B, by reason of unauthorized satellite beaming, can be said to infringe the copyright laws of nation B. Jurisdictional problems might be acute, in the absence of uniform rules. For example, if a performance happens to be in the public domain in nation A but not in nation B owing from extended copyright duration granted in nation B over the Convention minimum, which law would apply?[132] At the present, as the Berne Union provides no clear standards as to the scope of probable protection, or criteria for determining state jurisdiction, it seems appropriate to examine its substantive scope to determine its capability for covering future satellite broadcasts.

Of particular importance is the reconciliation of its provisions with those of the recent House bill. Article 11 (1) grants to authors the exclusive right of authorizing "public performance of their works" and "any communication to the public of the performance of their

---

supra note 41 at 26, 27; see also McConnell, "The Effect of the U.C.C.," *ASCAP Law Symposium,* Vol. 9, pp. 32, 62. But for a more general view of broadcasting rights, see Socolow, *The Law of Radio Broadcasting* (1939). "Where the broadcast of a copyrighted work is authorized in the originating country, the copyright may also be infringed in the country where the broadcast is publicly received." *Id.* at 1243.

[131] Nimmer, "Implications of the Prospective Revisions of the Berne Convention and the United States Copyright Law," *Stanford Law Review,* Vol. 19 (1967), pp. 499, 500.

[132] For a similar question considered but undecided, see Composers, Authors, & Publishers Ass'n. of Canada Ltd. v. International Good Music, Inc. (1963), Can. Sup. Ct. 136, 37 D.L.R. 2d. 1.

works."[133] However, as there are presently revision proposals of Article 14 (1) to extend the right of authors and performers to control the "communication to the public by wire of cinematographic works and reproductions," the full implications of the extent of coverage of 11 (1) can only be interpreted in light of 14 (1).[134] Article 11 (1) rights to authorize public performance by communication is meant to include any form of dissemination, then cinematographic rights in Article 14(1) appear to be superfluous.[135] But if the proposals for Article 14 (1) are intended to be meaningful, then cinematographic rights should either be express, or such rights of exhibiting dramatic and non-dramatic performances by satellite television facilities and any other means would logically be excluded.

Thus, by reason of ambiguities posed in the construction of the present Convention and revision proposals, there is at best doubtful assurance of satellite inclusion, and new drafts based on a proper consideration of the special problems of satellite communications will need to be developed. There would appear to be every justification, though, for both the United States and the Soviet Union to join and work with other members, particularly members concerned with the orderly development and operation of satellites, in clarifying and removing conflicts in the Berne provisions. For the present, at least, the statutory non-profit performance exceptions of many of the member countries and the United States (subject to revision) are not inconsistent with the text of Article 11 (1).[136]

Nevertheless, as Section 301 of the House bill does not prescribe state common law protection of unpublished performances, not included in Section 102 and 103 of the bill, a conflict might be created with Berne member countries whose own legislative protection is limited to reciprocal provisions consistent with their own and Berne rules.[137] Although Article XI of the U.C.C. requires only that members provide legal means of protecting unpublished performances of foreign nationals, which could be covered by alternative state/federal protections,[138] the Berne Union leaves to the member countries to extend protection or not to both published and unpublished works.[139]

---

[133] Berne Union, Art. 11 (1) in UNESCO, *supra* note 61.

[134] See Swedish/BIRPI Study Grp. Gen. Rep. 66 (1964) for analysis of Berne proposals.

[135] Nimmer, *supra* note 131 at 541.

[136] See Copyright Law Rev. 86th Cong. 2d. Sess. (Jud. Comm. 1960), pp. 111-115 for discussion of United States non-profit exemptions.

[137] H.R. 2512, *supra* note 46.

[138] U.C.C., Art. XI in UNESCO, *supra* note 61.

[139] See Stockholm Revision Proposal (S/1) of Berne Convention, Art. 2 (2).

Thus, in order to accord with a Berne member country's protection of unpublished works, United States treaty accession would have to be interpreted as somehow preempting state jurisdiction over unpublished works.[140]

It seems clear that neither the U.C.C. nor Berne Conventions offer ready made texts embracing satellite operations, and will need revising to fully effectuate global coverage. As a means for accommodating the virtues and defects of both, a wise course may be the merger of both conventions.

Advantages of U.C.C. and Berne Merger

At the present time, there are fifty-four member states in the U.C.C. and fifty-six members of the Berne Union. Twenty-four Berne members are not members of the U.C.C. and twenty-two U.C.C. members are not members of the Berne Union including the United States.[141] Attempts to create mutually binding rules among members of the respective conventions have been clearly limited by the narrow constructions on the extension of protection. Thus, a merger with revisions, may not only provide a stop-gap against unilateral denials of protection to foreign copyright holders of the originating satellite programs by respective non-convention members, but it may serve as an effective inducement for accession of the world's second satellite power, the Soviet Union.

Second, merger may help to engender support for retroactive application of convention protection for works, deemed in the national domain of the receiving country before the convention date.[142] At present, only the Berne Union offers retroactive application.[143]

Third, a merger would serve to substantiate the world community's commitments to a global satellite system. At the present, the U.C.C. does not provide the minimum protection accorded artists in CATV performance infringements under the present U.S. Copyright Act or its revision proposals.[144]

Finally, the administrative and technical expertise vital to a global communications system can be improved. At the present, the Berne

---

[140] But see U.S. v. Pink, 315 U.S. 203, 234 (1941) where the Court held that "In respect of all international negotiations and compacts, as in respect of our foreign relations generally, state lives disappear."

[141] Nimmer, *supra* note 131 at 550.

[142] Bogsch, *The Law of Copyright Under the Universal Copyright Convention* (1964) 81-84.

[143] *Id.*

[144] H.R. 4347, 89th Cong. 1st Sess. (1965).

Union offers the most extensive copyright research personnel of any international organization.[145]

The U.C.C. was designed to serve as a compromise to the more extensive protection extended by the Berne Union; however, it was not intended to be a rival.[146] Most important for the extension of international copyright protection to communication satellite activities was the hope expressed by Jean Thomas, Director of the Department of Cultural Activities (now UNESCO) in 1952:

> . . . The establishment of regular and continuous relations between all the countries adopting the convention will lay the necessary foundation for future development and progress. For thanks to the periodical revisions provided for in the text, we may legitimately hope to attain one day the ideal protection, which is our aim and which we all desire.[147]

Thus, rather than try to revamp the respective treaties to gain increased consensus, the nations of the emerging global satellite system might take a giant step toward fashioning a system of remedies to meet the multidimensional problems of space communications by accommodating the best features of both agreements. For example, it has been proposed that the existing Berne and Universal Copyright Conventions be merged in a World Intellectual Property Convention with administrative headquarters at Geneva, and equipped to maintain various services in the promotion of the harmonization of respective national legislation.[148]

Whether such a convention would better facilitate agreement on substantive rules and procedures for copyright disputes in space communications, one cannot safely assert, but it would appear to offer a fresh start toward the systemization of an area that is concededly political hypersensitive. The aims of such a convention would be to overcome the defects in the present Berne and U.C.C. of: (1) lack of time to properly assess complicated problems of copyright, and (2) the absence of specialized experts.[149] Certainly, in the field of performers rights in broadcasting and *a fortiori* space programming, expertise is vital to meaningful discussions.

---

[145] *Supra* note 131 at 553.

[146] Sterling and McCleod, "International Copyright Control: A Canadian Viewpoint," *Current Law and Society Problems* (1960), pp. 68, 75.

[147] Records of the Intergovernmental Copyright Conference, Geneva, 18 August-6 September, 1952 (UNESCO, 1955), 3rd Meeting, Tuesday, August 19, 1952, at 119.

[148] *Le Droit d'Auteur* (1965), p. 103.

[149] Miles, "Methods of Law Reform in Regard to Current Problems of Copyright and Related Matters," *Bulletin of the Copyright Society of the U.S.A.* Vol. 13 (1966), p. 171, 172.

Some Conclusions

Telecommunications promises to be a subject of great concern to the community of nations in the ensuing decades, and confronting all users is the question of whether they can afford to allow international satellite systems to become another pawn of world politics. Oscar Wilde once said: "To give advice is dangerous; to give good advice is fatal." However, the danger of such advice is patently outweighed by the need to modify existing rules and processes, originally designed to serve copyright interests attached to earth broadcasting, to meet the demand of a new dimension in communications technology—live performance television by synchronous satellites. According to John M. Cuelemaera of Saskatchawan in 1962:

> The future strength or safety of our society may well depend on the success or failure in the conquest of space, but I suggest to you that of equal importance are the ground rules of our society.[150]

The challenges and opportunities of the use of interspace communication systems and the interest of all nations in securing its use was reflected by Senator Albert Gore in December 1962 before the First Committee of the United Nations (the Political Committee to which the Committee on the Peaceful Uses of Outer Space makes its reports) when he assured the Committee that the United States would:

> . . . press forward with the establishment of an integrated global satellite communication system for commercial needs and a cooperative weather satellite system both with broad international participation.[151]

For the future, a closer assessment should be made of existing international communications regulatory agencies with a view to expanding their role of coordinating space communications.[152] The flexibility of international organizations to deal with new scientific developments was demonstrated by the International Telecommunications Union in 1963 in its sponsoring of an Extraordinary Radio Conference which resulted in the allocation of frequencies for communication satellite use; some frequencies exclusively others on a shared basis with other uses.[153] The Union also has provisions for arbitration

---

[150] Cuelemaera, "Law in the Space Age," *Saskatchawan Bar Review,* Vol. 27 (1962), pp. 10-11.

[151] Rep. to First Committee of U.N., Dec. 1962.

[152] See Address by Katzenbach, "The Development of Law for Outer Space," The Chicago Planetarium Society, Chicago, Ill., Dec. 7, 1961, p. 5.

[153] I.T.U., Final Acts of the Extraordinary Administrative Radio Conference to Allocate Frequency Bands for Space Radio Communication Purposes (Geneva 1963).

for resolving disputes concerning interference by one country with the telecommunications of another.[154] Although these provisions lack machinery for compulsory arbitration, providing only means for selecting arbitrators,[155] they would appear to offer valuable facilities for hearing and deciding copyright claims.

An additional source of arbitration facilities has been provided by INTELSAT through its Supplementary Agreement on Arbitration in 1966.[156] In addition to providing for decisions on action or inaction by the Interim Communications Satellite Committee (I.C.S.C.), the Agreement also authorized decisions to be rendered on any legal dispute arising in connection with any other agreement relating to the interim international arrangements.[157] Proper parties to a dispute are limited to signatories and the I.C.S.C.;[158] however, these provisions, seemingly, could be modified to accommodate private interests as well. Of further significance, no declaratory opinions are provided for,[159] the arbitral tribunal decisions will be binding on the parties to the dispute, and rulings on I.C.S.C. decisions as null and void are binding on all signatories.[160] Finally, decisions of the tribunal shall be based on interpretation of the Agreement, the Special Agreement, and the Supplementary Agreement in accordance with generally accepted principles of law.[161] To fully effectuate the latter provisions in securing copyright arrangements, a supplement to include international treaties would be required.

It appears then that the United States and members of INTELSAT have taken important strides in establishing a system of space satellite communications based on cooperation and mutual respect for legal restraints so as to promote desirable international television communications. Now it only remains to create uniform copyright rules and remedies that will assure the Van Cliburn, the Beatles, and other gifted performers, whose talents of world acclaim will be ultimately enjoyed by millions, in all countries, through the scientific phenomena of satellite, that they will be fairly compensated by those who transmit their performances. Interested nations must come to realize that their

---

154 Telecommunications Convention and Final Protocol, Dec. 21, 1959, annex, 4 T.I.A.S. No. 4892.

155 *Id.*

156 "Satellite Communications System," *State Department Bulletin,* Vol. 55 (1966), p. 906.

157 Supplemental Agreement of INTELSAT, Preamble and Art. 2 (a), (b).

158 *Id.* Art. 2 (a).

159 *Id.* Art. 2 (a), 11 (c).

160 *Id.* Art. 11 (c).

161 *Id.*

interest in protecting their respective artists from unauthorized exploitation will best be served through a system of uniform agreement and sharing of resources.[162] We must not delude ourselves, though; any agreement without Soviet participation on satellite copyright infringement, would provide only partial security.

For the future, it is the hope that copyright will be the first, but not the last, living example that space is not in fact a legal vacuum. Success will probably depend on our ability to answer this question: Will mankind be able to marshall, display and demonstrate the intelligence and good will required to meet the challenges of the space age? Time will be the best test for the U.S. Congress, INTELSAT members, and all other interested parties in maximizing the use of resources in outer space.

---

[162] In an address by Stephen Doyle of the State Department, he expressed the view that the United States would be willing to concede its present majority control of INTELSAT for Soviet accession to the Convention. Address by Stephen Doyle, Space Law Seminar, George Washington University Law School, Nov. 26, 1967.

IN MEMORIAM

CHESTER F. CARLSON, inventor of the Xerography process, Institute Advisory Council member, and recipient of the Institute's 1964 Inventor of the Year Award, died October 1968 in New York. Mr. Carlson had been an active member of the Institute for many years.

Mr. Carlson was an independent inventor who received his first patent in 1937 on a process he called "electro-photography." While working in the patent department of a New York City electronics firm in the early 1930's, Carlson recognized the difficulties in making extra copies of drawings and documents. In 1935 he began searching for a new way of transferring images from one page to another. For three years he worked alone on his idea while continuing with his full-time job and working to get his law degree. It was on October 22, 1938, in a tiny room in Astoria, Long Island, that Carlson finally succeeded in transferring an image to another piece of paper. This was the birth of electrostatic copying, later to be named Xerography. Twelve years passed, however, before Carlson was to see the realization of his idea. The first commercial use of Xerography was in 1950 when a Xerox copying machine was put on the market.

After his discovery in 1938, Carlson began to think he had an invention that nobody wanted. From 1939 to 1944, his idea was rejected by more than 20 companies. It "was met with an enthusiastic lack of interest," he said. Finally in 1944, Battelle Memorial Institute, a non-profit industrial research organization in Columbus, Ohio, undertook development work on Carlson's process. And in 1947, Haloid Corporation (later to become the Xerox Corporation) in Rochester, New York, took a limited license and began supporting the research at Battelle. The rest of the story is known. Xerox and other copying machines have become familiar sights in the modern office.

ARTHUR M. SMITH, Associate Judge, U. S. Court of Customs and Patent Appeals, and a former Area Committee Chairman of The PTC Research Institute, died in Washington, D. C. on November 19, 1968. Long an active member of the Institute, he served as its Detroit Area Committee Chairman prior to his appointment to the Court.

Judge Smith, a member of the Michigan and Illinois Bars, had been active in private practice in patent law in Chicago, Detroit, and Dearborn from 1929-1959, and had lectured on Patent Law at the University of Michigan Law School 1950-1959. He was appointed by Presi-

dent Eisenhower to the U. S. Court of Customs and Patent Appeals in 1959, the second expert in patent law to be appointed to that Court.

A member of the American Bar Association and a speaker on patents with their national speakers' bureau, Judge Smith also authored *Patent Law, Cases, Comments and Materials* (1954), *The Art of Writing Readable Patents* (1959), and numerous articles and reports. He was a Lincoln scholar and Vice President of the Lincoln Group of Washington, D. C. in 1963 and 1964.

HENRY VAN ARSDALE, a former Assistant Commissioner of Patents in the U. S. Patent Office and a Consultant on the Institute's study of Interferences and *In Rem* Invalidity, died in Washington, D. C. on November 24, 1968. He had been associated with the Institute for the past year in connection with its project on the Report of the President's Commission on the Patent System.

Mr. Van Arsdale went into private practice as a New York patent attorney, after serving in World War I as an Army Air Service sergeant. In 1936 he moved to Washington and spent 10 years as Assistant Patent Commissioner. Later, for 10 years before his retirement in 1965, he was trial attorney in the Justice Department.

Mr. Van Arsdale was a member of the National Lawyers Club, the American Patent Law Association, the New York Patent Law Association and served as president of the U.S. Aerial Photographic Association after World War I.

Institute to Celebrate 15th Anniversary

The advent of the 15th birthday of The PTC Research Institute of The George Washington University on February 11, 1969 will be celebrated by a reception, honoring its Patrons and Donor Members, to be held at the Shoreham Hotel in Washington, D.C.

The history of the Institute goes back to February 15, 1949, when the American Patent Law Association, by resolution and subsequently by referendum vote, recognized a need for research and education under university auspices on the patent and related systems. In accordance with this resolution and referendum, The George Washington University agreed to undertake the establishment of the Institute (then Foundation); and on February 11, 1954 the Institute was placed in operation by the Board of Trustees of the University. Men of national importance who indicated an interest in the enterprise by agreeing to serve as Honorary Members of the Institute were: Joseph W. Barker, Vannevar Bush, the late Cyrus S. Ching, the late John W. Davis, the late Charles F. Kettering, and the late Max McGraw.

The PTC Research Institute is dedicated to disinterested inquiry into invention, innovation, and the patent and related systems of the United States and other countries, and the dissemination of the findings to specialists and the public at large. Over the years a wider and wider audience has become interested in the research and educational programs and findings of the Institute, as indicated in the increase in the number and variety of members, the growing frequency of citation of the various reports of the Institute in the literature, and the increasing number of inquiries by government officials, and others, for information relating to the Institute's fields of interest.

Among the Institute's achievements during the past 15 years are:

(1) Establishment of a Research Staff of attorneys and social scientists from different specialties and fields of learning dedicated to a dispassionate inquiry into and reporting on invention, innovation, and the patent, trademark, copyright and related systems.

(2) Establishment of an Advisory Council, consisting of nationally recognized men in the fields of commerce, education, science, labor, finance and the profes-

sions, to advise on policy determination and the formulation of specific programs.

(3) Organization of a comprehensive and diversified research program directed to important current issues and subjecting the program to continuous examination.

(4) Establishment of the Journal *IDEA* and maintaining it on a quarterly basis.

(5) Development of a program for the stimulation of original papers for publication in *IDEA,* including the reports of the results of the research studies of the Institute, incidental studies by graduate students, invited outside contributions by senior scholars, and FORUM papers (by informed specialists) presented for study and discussion and not necessarily in conformity with the conclusions reached in the Institute's studies.

(6) Institution of an Annual Public Conference and publication of proceedings.

(7) Establishment of Area Committees to maintain grass-roots contact and spread the information and guidance to school systems and local organizations.

(8) Establishment of the annual Charles F. Kettering Award for outstanding work in research and education in the fields of the Institute's interests.

(9) Establishment of the Inventor of the Year Award to honor a journeyman or professional inventor who has made a significant patented invention or inventions and evidences outstanding personal qualities.

(10) Establishment of the Donald L. Brown Memorial Fund to be applied toward the remuneration of a Senior investigator for research related to patents and trademarks.

(11) Establishment, in conjunction with the Patent Office Society, of the Patent Office Society Student Award, presented annually, for the best paper written by a student in the five law schools of the District of Columbia.

(12) Organization of an International Public Lecture Series to provide an opportunity to exchange views with officials and other experts from abroad who are close to the new international developments relating to industrial property rights.

(13) Organization of a diversified educational program with such media of communication as three pamphlet series for young people entitled, "The Patent System All Around You," "The Trademark, the Maker's Monogram," "C in a Circle"; Guides to Institute research; and a seminar and lecture series.

(14) Preparation and distribution of a film entitled, "Fuel to the Fire," on the development of the U.S. patent system, how it came to be, why it is important, and what it means to the individual.

(15) Establishment of the Thomas Alva Edison Fellowship for graduate study of the patent

and related systems.

(16) Maintenance of a limited student research assistantship program for special cases and where the field of specialization of the student is particularly pertinent to a current field of interest of the Institute.

(17) Establishment and distribution of a *Digest,* a non-technical summary of the results of Institute research.

(18) Distribution of a *Bulletin,* including information on the organization of the Institute, the research program, the educational program, and a list of Institute Members.

(19) Periodic issue of *Reports to Members,* reviewing Institute developments, activities, people and publications.

(20) Maintenance of liaison with other organizations, bringing to bear the special contributions of the Institute in these coordinating activities.

(21) Establishment of a specialized library which would eventually become an important storehouse of published and unpublished literature for the needs and interests of students, patent specialists, teachers, research workers, professional people and others.

(22) The establishment and expansion of a nation-wide membership program representing all segments of the American community, as well as a number of distinguished foreign members. The membership of the Institute is comprised of individuals, firms, companies, foundations and associations. Currently, a second decade fund drive spearheads a comprehensive public information program to place the Institute on a stronger financial basis. This fund-raising program consists of: (a) increasing operating funds by obtaining new members and encouraging voluntary increases in dues from our present members; (b) raising a Capital fund from gifts, bequests and other non-recurrent sizable contributions; (c) seeking grants for the investigation of major problems as these are defined in the continuing investigations of the Institute.

(23) Establishment of modern permanent headquarters in the Joseph Henry Building on the campus of The George Washington University. This building also houses the National Academy of Sciences.

We go forward in confidence that the dispassionate inquiries we conduct will illuminate the path for new students and our society at large. Looking ahead we may expect the unique role of the Institute to become increasingly appreciated by the busy executive, the professional person and the independent lay audience as the need for unbiased research findings becomes ever more pressing in our democratic society in which the general public and their representatives and agents are required to make decisions affecting our institutions.

Edison Fellowship Awarded to Wallace Johnston

The PTC Research Institute awarded the 1968-69 Thomas Alva Edison Felowship to Wallace Johnston of Arlington, Virginia.

The Fellowship consists of a $5,000 grant and a full-tuition waiver from the University. Given annually for graduate study in patent and related systems, the Fellowship is sponsored by the Thomas Alva Edison Foundation, with special assistance by the McGraw Foundation. Mr. Johnston's doctoral research will be under the guidance of a member of the Research Staff of The PTC Research Institute.

Mr. Johnston received his predoctoral training in business administration from The George Washington University. The subject of his doctoral thesis will be concerned with patents and executive decision-making.

Rollins Wins Society Student Award

Alton D. Rollins of Washington, D. C., is the recipient of the 1968 Patent Office Society Student Award for his paper entitled *"In Rem* Invalidity: A Solution in Search of a Problem?" The Award paper was submitted in partial fulfillment of the requirements for Legal Writing, in a course conducted by Professor L. James Harris, the National Law Center of The George Washington University. It appears in the Student Papers section of Summer-Fall 1968 issue of *IDEA*. (Vol. 12, No. 2-3).

This year the Award program was extended to all of the law schools in the District of Columbia, including American, Catholic, Georgetown, George Washington and Howard Universities.

A citation from the Institute and an honorarium contributed by the Society was presented to Mr. Rollins by Professor Harris at the annual Patent Office Society Banquet on December 7. On this occasion, Peter F. Nolan, the author of the best paper submitted by a student from Georgetown University also received a citation. The title of his paper was "Copyright Protection for the Motion Picture: Limited or Perpetual?"

Conference Proceedings Published

The complete Proceedings of the Institute's Twelfth Annual Public Conference are now available in *IDEA*, Volume 12, Conference Number 1968.

The theme of the Conference—

"Industrial Property: Instrument to Foster Technology For Economic Advance." The Conference consisted of the following sessions.

Toward the Modernization of Industrial Property in the United States
- Part I—Patent Outlook
- Part II—Trademark Outlook

Toward the Accommodation to Modernization: Interplay of Unfair Competition and Antitrust Doctrines

Toward the Improvement of International Arrangements for Industrial Property, covering areas of PCT, OAS, UNIDO, EEC and Japan.

Also included in the Conference Number is the Kettering Award Address, "Existing Uniformity of Industrial Property Laws and Revised Patent of Introduction: Means for Transfer of Technical Information to Less Industrialized Countries," given by Stephen P. Ladas upon the occasion of his acceptance of the Institute's 1967 Charles F. Kettering Award.

In addition, this issue of *IDEA* contains the Address "The Pace of Change," given by John F. Kincaid, Assistant Secretary of Commerce for Science and Technology, at the Conference Luncheon.

Brown Memorial Fund To Remunerate Senior Investigator

The first third of the Donald L. Brown Memorial Fund is being employed this year as part of the stipend to John C. Green, Project Leader on a major project of the Institute on The Role of Industrial —Intellectual Property Protection in the Promotion of International Trade and Development. Special attention is being given in this project to existing and proposed national and supranational legislative and treaty arrangements. The analysis and interpretation of the project results will reveal and illuminate the challenge and opportunities presented by foreign markets to American interests.

Mr. Green is a highly regarded Senior Research Investigator who served as Advisor to the Department of State and International Cooperation Administration, Executive Director with the National Inventor's Council, Director of the Office of Technical Services (U. S. Department of Commerce), and Director of Research, R&D Division of the Office of Emergency Planning.

The Donald L. Brown Memorial Fund was established through a grant from the Polaroid Corporation in 1967, in memory of Mr. Brown, an eminent patent and trademark attorney. A member of the Board of Directors of the Polaroid Corporation since its in-

ception, Mr. Brown had also been a very active member of the Institute's Advisory Council. The purpose of the Memorial Fund is to contribute toward the remuneration of a Senior Investigator for research related to patents and trademarks.

Bennett, Bowes, and Nesty Join Institute Advisory Council

The PTC Research Institute is pleased to announce that W. M. Bennett, T. L. Bowes, and Glenn A. Nesty, nationally recognized experts in their respective fields, have been appointed as new members to its Advisory Council. Mr. Bennett is Director of Civic Affairs for the 3M Company (Minnesota Mining and Manufacturing Company); Mr. Bowes is General Patent Counsel of Westinghouse Electric Corporation; and Dr. Nesty is Vice-President, Director, and Senior Technical Officer of Allied Chemical Corporation.

The Advisory Council, consisting of eminent men from various disciplines, advises the Institute on policy determination and the formulation of specific programs. Different fields represented include commerce, education, science, manufacturing, finance, labor and the professions.

Institute Publishes New Digest

Just off the press, a new *DIGEST* on "Institute Research—Relevance to National Issues," describes results of the most recent Institute studies with special reference to the Recommendations of the President's Commission on the Patent System. The Digest is a non-technical summary of the results of Institute research and presents news of its educational activities. Copies may be obtained by writing The PTC Research Institute, The George Washington University, Washington, D. C. 20006.

INDEX* TO VOLUME XII, 1968-69

A

Accommodation to Modernization, Toward: Interplay of Unfair Competition and Antitrust Doctrines, *116*
Adler, Robert, 718
Administrative Problems, Japanese, Relating to Industrial Property and Transfer of Technological Information, *231*
Alegi, Peter C., 643
Antitrust Casebook, New Edition Published, 739
Antitrust Doctrines
  Interplay with Unfair Competition (Toward the Accommodation to Modernization) *116*
  Interplay with Unfair Competition Under Section 5 of the Federal Trade Commission Act, *119*
Antitrust Laws, Interplay with Trade Symbol Protection, *146*
Antitrust and Unfair Competition: Coexistence within Complementary Goal, *137*

B

Bangs, Robert B., *25, 999*
Bany, Hermann, 736
BIRPI
  Administrative Reorganization of—and WIPO, 673
  1968 Draft of Patent Cooperation Treaty — Compared with Simple New Alternative Proposal, 860
Bowes, Theodore L., 1129
Braderman, Eugene M., 673
Brenner, Edward J., *181*
Brufsky, Allen D., *97*

C

Callman, Rudolf, *137*
Carlson, Chester F., 1193
CATV, A Bridge From—Copyright Liability for Communication Satellites, 1161
Claims, or Search Definitions, Basis for International Novelty Search? 872
Common Market Treaty, Industrial Property Development under, *219*
Communication Satellites, Copyright Liability for: A Bridge from CATV, 1161
Company Executive Study on Presidential Commission Report, *20*
Computer, Software, Patent Protection for, Implications for the Industry, 1109

* This subject index is limited to key words and phrases in the titles. It also includes names of authors and Conference participants.

Italic numbers in the index refer to pages in the 1968 Conference Number of *IDEA*.

Conventions and Treaties, Industrial Property, Inter-American, *197*
Cooper, John J., *241*
Copyright Liability For Communication Satellites: A Bridge from CATV, *1161*
Copyright Protection For Motion Pictures: Limited or Perpetual, *1135*

D

Denny, James E., *81*
DeSimone, Anthony R., *102*
Developing Countries, Role of Patents in the Industrialization of, *210*
Diamond, Sidney A., *89, 109*
Dole, Richard F., *146*
Dolezil, Vladimir, *210*

E

Economic Advance, Industrial Property: Instrument to Foster Technology for, *1-246*
Economic Aspects of Trademarks, Products of U. S. Firms: Economic Implications, *90*
Economic Aspects of Trademarks, Products of U. S. Firms: Legal Implications, *97*
EEC (European Economic Community) Industrial Property Development Under the Common Market Treaty, *219*
Executive, (Company) Study on Presidential Commission's Report, *20*
Executive Views, (Medium-Sized Companies) on Presidential Commission's Patent Recommendations, 617

F

Federal Trade Commission Act, Under Section 5: Interplay of Unfair Competition and Antitrust Doctrines, *119*
Finn, Gene L., *47, 1053*
First-to-File Priority System: Possibilities and Problems, 944
Foreign Experience and Opinion, (Informed) on Provisions Similar to Commission Recommendations, *1021*
Foreign Experts Study (Institute Study on Presidential Commission's Report), *38*
Foreign Inventor's Behavior Under U. S. and Foreign Patent Systems, *1053*
Foreign Inventor Study (Institute Study on Presidential Commission Report: Methods and Objectives), *47*
Foreign Licensors, Taxation in Italy, 643
Foreign Opinion and Experience Compared with U. S. (Institute Study on Presidential Commission's Report Methods and Objectives), *42*
Forrester, Jay W., 730

G

Global Exchange of Patents, An Analysis of Patent Statistics, 818
Goldsmith, Harry, 691, 889
Goldsmith, S. Delvalle, *178*
Gray, John L., *72*
Green, John C., 753, 764, 778, *16, 48, 86*

H

Harris, L. James, 631, 739, *6, 42, 1021, 1053*
High Cost of Interference, Mistaken Assumptions on, *1099*
Hirabayashi, Tsutomu, *231*
Howrey, Edward F., *119*
Human Rights, and Protection of Intellectual Property, 889

I

Industrialization of Developing Countries, Role of Patents in, 210
Industrial Property
- Administrative Problems (Japanese) Relating to, (and Transfer of Technological Information), *231*
- Development Under the Common Market Treaty, *219*
- Modernization in the U. S., Patent Outlook, *13*
  Trademark Outlook, *89*
- Technology for Economic Advance, Industrial Property Instrument to Foster, *1-246*
- Towards Improvement of International Arrangements, *178*
- Treaties and Conventions, Inter-American, *197*

Industrial Property Laws—Existing Uniformity of and Revised Patent of Introduction: Means for Transfer of Technical Information to Less Industrialized Countries, *163*
In Rem Invalidity—Solution in Search of a Problem, 901
Institute Director Awarded Jefferson Medal, 739
Institute Studies on Presidential Commission Report, Methods and Objectives, *16*
Intellectual Property, Protection of and Human Rights, 889
Inter-American, Treaties and Conventions [on] Industrial Property, *197*
Invalidity, *In Rem*—Solution in Search of a Problem, 901
Interference, Mistaken Assumptions on the High Cost of, *1099*
International
- Arrangements for Industrial Property—Toward Improvement of, *178*
- Novelty Search Based on Claims or Search Definitions, 872

Inventors
- Competent, and the President's Commission, *999*
- Foreign, Behavior under U.S. and Foreign Patent Systems, *1053*

Foreign—(Institute Studies on President's Commission Report), *47*
U.S. Study (Institute Studies on President's Commission Report), *25*
Inventor of the Year
Award Acceptance Address, 718
Award Nominees Career Highlights, 723
Italy, Taxation of Foreign Licensors in, 643

J

Jackson, Edward Lovett, 657
Jackson, Joseph Gray, 657
Japan
Administrative Problems Relating to Industrial Property and the Transfer of Technological Information, *231*
Licensing in Technological Cooperation, Present Situation and Prospects, *235*
Jefferson Medal, Awarded to Institute Director, 739
Jenkins, George H., *76*

K

Kahn, Stephen D., 944
Kettering Award Address, *163*
Kilby, Jack S., 724
Kincaid, John F., *57*
Koller, Herbert R., *1109*
Kopaska, Arnold F., 732
Kramer, Robert, *5*

L

Ladas, Stephen P., *163*
Lambert, Benjamin F., 703
Langballe, P. O., 872
Less Industrialized Countries, Means for Transfer of Technical Information to: Existing Uniformity of Industrial Property Laws and Revised Patent of Introduction, *163*
Licensing, Prospects and Present Situation in Technological Cooperation in Japan, *235*
Licensors, Taxation of Foreign in Italy, 643
Lightman, Joseph, 791, *90*

M

Mizutori, M., *235*
Modernization (of) Industrial Property in the U. S.
Patent Outlook *13*
Trademark Outlook *89*
Modernization, Toward Accommodation to: Interplay of Unfair Competition and Antitrust Doctrines, *116*
Moshman, Jack, *1109*
Motion Pictures, Copyright Protection: Limited or Perpetual? *1135*

N

Nolan, Peter F., *1135*
Novelty Search, International, Based on Claims or Search Definitions, 872

O

OAS (Office of American States) Industrial Property Treaties and Conventions of an Inter-American Nature, *197*
Oppenheim, S. Chesterfield, *116*
Oshins, Robert L., *210*

P

Pace of Change, *57*
Patents
- Global Exchange of, an Analysis of Patent Statistics, 818
- Instruments of Positive Competition, 631
- Role in the Industrialization of the Developing Countries, *210*

Patent Assignor (Inventor) — Assignee Study in President's Commission Report, *31*
Patentability, Rule of Doubt, 703
Patent Cooperation Treaty—1968 BIRPI Draft Compared with Simple New Alternative Proposal, 860
Patent Cooperation Treaty, Proposed, *181*
Patent Laws, U. S., Observations on Presidential Commission's Recommendations for Recasting of, *1069*
Patent Licenses
- Use Limitation in, 657
- Use Limitations in, Correspondence on, *1129*
- Patent Outlook, Part I of Modernization of Industrial Property in the U. S., *13*

Patent of Introduction, Revised and Existing Uniformity of Industrial Property Laws: Means for Transfer of Technical Information to Less Industrialized Countries, *163*
Patent Protection, For Computer Software (Implications for the Industry), *1109*
Patent Systems, U. S. & Foreign, Foreign Inventors Behavior Under, *1053*
Positive Competition, Patents and Trade Secrets: Instruments of, 631
Prasinos, Nicholas, *70*
Presidential Commission's Recommendations on the Patent System
- Executive Views (Medium-Sized Companies), 617
- Public Interest Agencies View, 764
- Some Modifications on, 753
- Research Administrators Appraise, 778
- Institute Studies, the Methods and Objectives of, *16*
- Company Executive Study, *20*
- Inventor Study (U.S.), *25*
- (U.S.) Patent Assignor (Inventor) —Assignee Study, *31*
- Foreign Experts Study, *38*
- Comparison of U. S. and Foreign Opinion and Experience, *42*
- Foreign Inventor Study, *47*
- Public Sector Study, *48*

Competent Inventors and the President's Commission, *999*

Informed Foreign Experience and Opinion on Provisions Similar to Commission Recommendations, *1021*
Foreign Inventors Behavior under U. S. and Foreign Patent Systems, *1053*
Observations on Presidential Commission's Recommendations for Recasting the U. S. Patent Laws, *1069*
Priority System, First-to-File: Possibilities and Problems, 944
Proposals to Revise the Patent System, Research Administrators Appraise, 778
Public Sector Study (Institute Study on Presidential Commission's Report), 48
Public Interest Agencies View, Presidential Commission's Recommendations on Patent System, 764

R

Research Administrators, Appraise Proposals to Revise the Patent System, *778*
Rinker, Edwin C., 735, *67*
Robbins, Leonard J., 860
Rollins, Alton D., 901
Rule of Doubt, Patentability, 703

S

Sanders, Barkev S., *31, 1069*
Saotome, Shozo, *235*
Schmuckler, Gideon, 617, 753, 764
Search Definition or Claim—As a Basis for International Novelty Search, 872
Section 5 of the Federal Trade Commission Act, Interplay of Unfair Competition and Antitrust Doctrines [thereunder], *119*
Siegel, Irving H., 617, *20*
Simpson, Robert E., *210, 214*
Smith, Arthur M., *13* 1193
Spencer, Lloyd, *85*

T

Taxation, Foreign Licensors in Italy, 643
Technical Information, Means of Transfer to Less Industrialized Countries: Existing Uniformity of Industrial Property Laws and Revised Patent of Introduction, *163*
Technological Cooperation (Japan,) Licensing, Present Situation and Prospects of, *235*
Technological Information, Transfer of Japanese Administrative Problems Relating to It and Industrial Property *231*
Technology, Industrial Property: Instrument to Foster [it] for Economic Advance, *1-246*
Trade Aspects, of USSR Trademark System, Domestic & International, 791
Trademark Outlook
Economic Aspects of Trademarked Products of U. S. Firms, Economic Implications, *90*

Economic Aspects of Trademarked Products of U. S. Firms: Legal Implications, *97*
Toward the Modernization of Industrial Property in the United States (Part II), *89*
Trademark System, of USSR, Trade Aspects, Domestic & International, 791
Trade Secrets, Instruments of Positive Competition, 631
Trade Symbol Protection, Interplay with Antitrust Laws, *146*
Treaties, Conventions, [on] Industrial Property, Inter-American, *197*
Treaty, Common Market, Industrial Property Development Under, *219*

U

Unfair Competition,
Interplay with Antitrust Doctrines: Toward Accommodation to Modernization *116*
Interplay with Antitrust Doctrines, Under Section 5 of the Federal Trade Commission Act, *119*
Antitrust Coexistence within Complementary Goals, *137*
UNIDO (United Nations Industrial Development Organization) Role of Patents in the Industrialiation of the Developing Countries, *210*
Uniformity, (Existing) of Industrial Property Laws and Revised Patent of Introduction: Means for Transfer of Technical Information to Less Industrialized Countries, *163*
United States
Modernization of Industrial Property in, Patent Outlook, *13*
Modernization of Industrial Property in, Trademark Outlook, *89*
Comparison of U. S. with Foreign Opinion and Experience (Institute Study on Presidential Commission Report), *42*
Inventor Study (Institute Study on Presidential Commission Report), *25*
Patent Assignor (Inventor) — Assignee Study (Institute on Presidential Commission Report), *31*
Use Limitation, Patent Licenses, 657
Use Limitations, Patent Licenses, Correspondence on, 1129
USSR Trademark System, Trade Aspects, Domestic and International, 791

V

Van Arsdale, Henry, 1099, 1194

W

Was, D.A., 818
Waters, Eric, *190*
Weiser, Gerard J., *38*, 1021

Werner, Robert L., *219*
Wesley, Roger, 1161
World Intellectual Property Organization (WIPO)
Administrative Reorganization of BIRPI, 673
Noble Idea Whose Time Has Come, 691

Z

Zanotti, Isidoro, *197*

Proceedings
Twelfth Annual
Public Conference

The PTC Research Institute of
The George Washington University

IDEA

CONTENTS

Industrial Property: Instrument to Foster Technology for Economic Advance

The Conference 1

Proceedings of the Conference 5

Thursday, June 20, 1968

Welcome—**Robert Kramer,** Dean, The National Law Center, The George Washington University 5

Introductory Remarks—**L. James Harris,** Director of The Patent, Trademark, and Copyright Research Institute and Professor of Law, The George Washington University 6

FIRST SESSION

Toward the Modernization of Industrial Property in the United States

***Part I*—Patent Outlook**

Moderator-Commentator—**Arthur M. Smith,** Judge, U.S. Court of Customs and Patent Appeals 13

Division A—Contributors
Speakers:
John C. Green,* Scientific Communications and Research Consultant, Washington, D.C.; Method and Objectives of Institute Studies on Presidential Commission's Report 16
Irving H. Siegel,* W. E. Upjohn Institute for Employment Research; Company Executive Study 20
Robert B. Bangs,* Economist with the U.S. Department of Commerce; U.S. Inventor Study 25
Barkev S. Sanders,* Actuarial Consultant to the Graduate School of Public Health, University of Pittsburgh; U. S. Patent Assignor (Inventor)-Assignee Study 31
Gerard J. Weiser,* McClure and Weiser, Philadelphia; Study of Foreign Experts 38
L. James Harris, Director of The Patent, Trademark, and Copyright Research Institute; Comparison of U.S. and Foreign Opinion and Experience 42
Gene L. Finn,* Financial Economist, Securities and Exchange Commission; Foreign Inventor Study 47
John C. Green,* Scientific Communications and Research Consultant, Washington, D. C.; Study of Public Sector 48
Division B—Panel Discussion and Question Period (The panelists are named in "Speakers") 54

LUNCHEON SESSION

Presiding—**Earl P. Stevenson,** formerly Chairman of the Board, Arthur D. Little, Inc.; former Institute Advisory Council Chairman
Luncheon Address—"The Pace of Change," **John F. Kincaid,** Assistant Secretary of Commerce for Science and Technology 57

FIRST SESSION, CONTINUED

Toward the Modernization of Industrial Property in the United States

*Research Staff members of the Institute are designated by asterisks.

Part I—**Patent Outlook**

Division B—Panel Discussion (continued) 66

Discussants:

Edwin C. Rinker, Vice President and Technical Director, Sel-Rex Corporation 67

Nicholas Prasinos, Business Manager, Microwave Associates, Inc. 70

John L. Gray, Vice President and General Manager of Battelle Development Corporation 72

George H. Jenkins, Vice President, Research and Development, The Gates Rubber Company 76

James E. Denny, Chief, Infringement and Royalties Division, Office of Assistant General Counsel for Patent Matters, National Aeronautics and Space Administration 81

Lloyd Spencer, Lyon and Lyon, Los Angeles 85

John C. Green,* Scientific Communications and Research Consultant, Washington, D. C. 86

Part II—**Trademark Outlook**

Moderator-Commentator—**Sidney A. Diamond,** Kaye, Scholer, Fierman, Hays and Handler, New York 89

Division A—Contributors

Speakers:

Joseph M. Lightman,* Foreign Business Practices Division, Office of Commercial and Financial Policy, U.S. Department of Commerce; Study of Economic Aspects of Trademarked Products of U.S. Firms: Economic Implications 90

Allen D. Brufsky,* Brufsky and Staas, Washington, D.C.; Study of Economic Aspects of Trademarked Products of U.S. Firms: Legal Implications 97

Discussant:

Anthony R. DeSimone, Legal Department, Merck & Co. 102

Sidney A. Diamond, Kaye, Scholer, Fierman, Hays and Handler New York 109

SECOND SESSION

Toward the Accommodation to Modernization: Interplay of Unfair Competition and Antitrust Doctrines

Moderator-Commentator—**S. Chesterfield Oppenheim,** Adviser on Re-

search of the Institute; Professor Emeritus of Law, University of Michigan 116
Division A—Contributors
"Interplay of Unfair Competition and Antitrust Doctrines Under Section 5 of the Federal Trade Commission Act," **Edward F. Howrey,** Howrey, Simon, Baker and Murchison, Washington, D. C.; formerly Chairman, Federal Trade Commission 119
"Unfair Competition and Antitrust: Coexistence Within Complementary Goals," **Rudolf Callmann,** Greene, Callmann and Durr, New York 137
"The Interplay of Trade Symbol Protection and the Antitrust Laws," **Richard F. Dole,** Associate Professor of Law, College of Law, The University of Iowa 146
Division B—Panel Discussion and Question Period (The panelists are named in "Contributors") 155

Kettering Award Address

"Existing Uniformity of Industrial Property Laws and Revised Patent of Introduction: Means for Transfer of Technical Information to Less Industrialized Countries," **Stephen P. Ladas,** Senior Partner in the firm of Langner, Parry, Card & Langner of New York 163

Friday, June 21, 1968

THIRD SESSION

Toward the Improvement of International Arrangements for Industrial Property

Moderator-Commentator—**S. Delvalle Goldsmith,** Langner, Parry, Card and Langner, New York 178
Division A—Contributors
PCT—Speaker: **Edward J. Brenner,** Commissioner of Patents, U. S. Patent Office; Proposed Patent Cooperation Treaty 181

Discussant: **Eric Waters,** Haseltine, Lake and Company, New York 190

OAS—Speaker: **Isidoro Zanotti,** Acting Chief, Codification Division, Department of Legal Affairs, Office of American States; Industrial Property Treaties and Conventions of an Inter-American Nature 197

Discussant: **Francis C. Browne,** Browne, Schuyler and Beveridge, Washington, D. C. 203

UNIDO—**Robert L. Oshins,** Director, Industrial Services and Institutions Division, UNIDO; and **Vladimir Dolezil,** Industrial Development Officer, UNIDO; "The Role of Patents in the Industrialization of the Developing Countries," a paper presented by **Robert E. Simpson,** the discussant listed below. 210

Discussant: **Robert E. Simpson,** Director, Office of International Regional Economics, Bureau of International Commerce. 214

EEC—Discussant: **Robert L. Werner,** Executive Vice President and General Counsel, Radio Corporation of America; Industrial Property Development Under the Common Market Treaty 219

JAPAN—Speakers: **Tsutomu Hirabayashi,** First Secretary of the Embassy of Japan, Washington, D. C.; Japanese Administrative Problems Relating to Industrial Property and the Transfer of Technological Information 231

Shozo Saotome, General Manager, Patent Department of Mitsubishi Chemical Industries, Ltd., Japan, "Present Situation and Prospects of Licensing in Technological Cooperation in Japan," a paper presented by **M. Mizutori** of the New York office of Mitsubishi 235

Discussant: **John J. Cooper,** General Counsel, Varian Associates, Palo Alto, California 241

IDEA is published by The Patent, Trademark, and Copyright Research Institute of The George Washington University four times a year, quarterly in spring, summer, fall and winter. Second-class postage paid at Washington, D. C. and additional offices. To non-members: $3.50 per regular issue, Conference Number, $5.00 per copy. Printed by Monumental Printing Co., Baltimore, Md.

Address all communications to: The Patent, Trademark, and Copyright Research Institute, The George Washington University, Washington, D. C. 20006.

Individuals are invited to submit manuscripts to **IDEA**.

The Patent, Trademark, and Copyright Research Institute sponsors objective research in accordance with the Declaration of Trust establishing the Research Institute. This purpose is set forth in Article IV, Section 1 of the Declaration as follows: "The purposes and objects of the Research Institute shall be promoted and carried on without regard to, and independently of, the special interests of any group or body politic, whether political, legal, social, or economic."

The positions taken by authors of articles in **IDEA** which are not the product of the Research Institute's research program are not necessarily those of the Research Institute.

The Conference

The Twelfth Annual Public Conference of The PTC Research Institute was directed toward industrial property as an instrument to foster technology for economic advance. The Ninth and Tenth Annual Public Conferences had been designed to serve as a data base for the President's Commission on the Patent System. The Eleventh Conference was held after the Commission's Report had been published and was intended to provide perspective.

This Twelfth Conference analyzed research bearing on the Presidential Commission's Report and proposed federal legislation stemming from the Report. The industrial property systems were considered by invited speakers as well as staff members in the light of the public interest, recent court decisions, and existing inventor and company situations. Legislative needs involving industrial property were analyzed for their relationship to economic, technological, and cultural advancement. Special attention was directed to the improvement of the international role of industrial property for both advanced and newly industrialized countries.

The research work of The PTC Research Institute represents the first university attempt at a comprehensive study of the patent, trademark, copyright and related systems in the United States. This study is systematically planned and coordinated, inter-disciplinary in nature and utilizes a combination of specialties such as economics, statistics, psychology, sociology, and law; and empirical, that is, based on the facts gathered by the staff on the actual operation of the systems.

In attendance at this Twelfth Annual Public Conference were key representatives from different fields of activity throughout the nation: commerce, education, science, manufacturing, labor, finance, and the professions.

The proceedings of the Conference are published in this issue of *IDEA*. It contains an edited transcript of the proceedings which includes research prepared by the staff of the Research Institute preceding the Conference, the presentation of current issues by qualified speakers and discussants, and questions from the floor.

Presentations of invited contributors are set forth as separate papers. This format packages the contributions of individuals as discrete, easily discernable units. Although it is our custom to print the edited version of the verbatim presentations, we have, upon request, substituted more complete papers.

Summaries were submitted by a number of participants (when they returned their remarks for publication) and we print them as an introduction to their presentations. We hope that these synopses will provide busy executives and professional people ready access to the rich information contained in the papers.

Industrial Property: Instrument to Foster Technology for Economic Advance

The Proceedings of the Conference

Thursday, June 20, 1968

DIRECTOR L. JAMES HARRIS: Good morning, Ladies and Gentlemen. First, I want to thank you all for braving the Washington situation to be with us, despite the dire predictions in the press dispatches. The Research Institute is part of The National Law Center of The George Washington University, and we are pleased to have with us this morning the Dean of The National Law Center. Since we think very highly of our Dean, we asked him to be with us this morning so that he could, perhaps, relax a little. You all know how difficult it is today for university administrators.

It gives me great pleasure to introduce the Dean of the National Law Center, Robert Kramer. (Applause)

Welcome

ROBERT KRAMER

Thank you Lou. Ladies and Gentlemen, at this early hour I suppose my appearance here serves three purposes: one, as stated in the program, as Dean of The National Law Center of The George Washington University with which The Patent, Trademark, and Copyright Research Institute is closely affiliated, it gives me the greatest of pleasure to welcome all of you to the Twelfth Annual

Public Conference.

As Professor Harris pointed out, you really are, I think, to be congratulated on your fortitude and courage in appearing this morning in spite of all the scare stories in the press and all of the marches, counter marches, threats and counter threats. We are delighted to have you here and do most cordially welcome you.

I might add a personal note, that as Professor Harris said, I feel I am very lucky to be here. Any time a Dean or Administrator can get out of his office these days he really has luck with him. Whether I will ever get back in, of course, is something else.

The second purpose I serve, and this is true of all opening and welcoming remarks, is that this is a rather early hour and if I can pass a few minutes here not too painfully with you it will give some of the people who have been delayed a chance to enter and be here when the real Conference gets under way.

My final purpose in some ways, I feel, is the most important one: that is to join you, and I am sure I speak for you when I say this, to join you in expressing my appreciation and your appreciation, my gratitude and your gratitude to the man who has planned this Conference, as he has planned all the previous Conferences, who is the guiding spirit and the organizer and the person behind all the work of the Institute. I refer to that gentleman and scholar who introduced me, Professor L. James Harris.

At this time I would like once again to emphasize the huge debt that The George Washington University and The National Law Center and The PTC Research Institute owes to Professor Harris for his dedicated service to the Institute which quite literally has made possible the outstanding success of its program.

Professor Harris, I do thank you. (Applause)

Introductory Remarks

L. JAMES HARRIS

DIRECTOR HARRIS: Thank you, very much, Dean Kramer. As I indicated many times before, the Institute is an all-hands job. We are very fortunate in our research and office staffs. Most of them, like the members of our Advisory Council, have given dedicated service for a

number of years. The members of the Institute and of our Area Committees have also served us faithfully.

Ladies and Gentlemen, the issues confronting our society and the patent profession today are similar to those that faced the patent profession when the Institute was proposed in 1949, and placed in operation in the early Fifties. Today, the basic principles and institutions of our society are being challenged; in the late Forties and early Fifties, the fundamentals of the patent and related systems were also at stake. Although the threat today is more comprehensive and concerns the very structure and fabric of society itself, the dangers to the industrial property system are similar.

When the Institute was organized, some people were questioning whether the patent and related systems were contributing to the progress of science and the useful arts, in accordance with the mandate of the Constitution. These people questioned proponents of the system who believed that it fostered inventive resourcefulness, the development of technical know-how, the investment of risk capital, and scientific research.

Then, as now, these doubts were reflected in the literature, in the hearings, investigations, and reports of the various branches of government. Then, as now, the doubters asked how have these systems contributed to the welfare of Americans, or have they? Do they provide important employment opportunities? Are the creative incentives of the system indispensable and are the rewards adequate for scientists, inventors, and authors? How do the systems influence the large and small industrialist or businessman to invest risk capital in new enterprises and to help his company or industry grow?

Out of the uncertainties and the gaps in knowledge relating to industrial and intellectual property the need for this Institute arises. If such an institute were not in existence, in view of the current proposals for change in the industrial property laws, it would now be necessary to establish one, and to engage qualified experts in various fields to study and analyze the nature and the value of these systems and their function in society.

It seems to me, then, that we are most fortunate that this Institute has been engaged in a variety of such investigations, concerned with the private and public interest, from its very beginning in February of 1954 when the Board of Trustees of The George Washington University placed it in operation, and has been making the facts available to the citizens of the country in objective reports.

It is clear from our work that industrial property must be studied as an integral part of our free enterprise system. Thus, the current efforts

to improve certain aspects of the law on industrial property must be considered in context with the totality of problems affecting our society at this time. The important relationship of industrial property to our economic and legal systems was forcefully brought home to me in a study that the Institute has been engaged in on "positive competition." In a paper published in 1959, Dr. Siegel, a Senior Economist on our Research Staff, and I introduced the concept of positive competition to direct attention to the pervasiveness of competitive behavior as the dominant feature of our legal-economic system. Our original objective was to develop a philosophy for the patent system, and based on that philosophy, to introduce standards to provide a better perspective from which to appreciate the performance of the system and to judge the need for constructive legislation.

After considerable thought and discussion, we came to realize that an understanding of the potential of this property could only be achieved to the extent that its function was perceived as part of the free enterprise system, and when the free enterprise system was viewed as the context in which this type of property accomplished progress in science and the useful arts. Indeed, we discovered that our philosophy of positive competition referred to practically all of our attitudes and actions positively contributing to our economic and social well being, to peaceful transactions with other countries and to the improvement in productive techniques. Thus, an understanding of the potential of industrial property can have a direct bearing on our efforts to improve constructively the legal and economic institutions of this country for the private benefit and for the public interest, consistent with our basic Constitutional principles.

With the establishment of the President's Commission on the Patent System, the foresight of those who founded the Institute can be better appreciated. Since the Institute's inception we have gathered and published a good deal of data relating to the interests of the President's Commission, with, of course, no special foreknowledge that such a Commission would be established. In the First Session of the Conference, we will examine the Commission's recommendations and proposed legislation stemming from them to determine if their acceptance would, in fact, encourage, discourage, or otherwise affect the work of innovators and the process of innovation. Since many of the Commission's proposals are concerned with moving our patent system in the direction of patent systems in other countries, particularly Western Europe, an effort has been made to encompass experience abroad.

The members of the Research Staff, in this session, will present

available factual evidence on the important issues; the discussants will direct their attention to the evidence presented, contribute additional information, and surface problems they believe to be important and that require further study. The discussants will represent the research executive, attorney, inventor, in both industry and government. Arthur M. Smith, Judge, U. S. Court of Customs and Patent Appeals, is the Moderator-Commentator for this session.

We are combining the function of Commentator with that of Moderator in this Conference so that the views of the different disciplines and professions represented can achieve a new and more productive integration. Thus, the Moderator will be able to spotlight available statistics or other social, legal-economic evidence, or to take account of different positions so as to balance the presentations in the various sessions.

Part II of this session is concerned with the Trademark Outlook. The doubts concerning the value of the patent system have also been reflected in the legal and economic literature relating to trademarks. Recent evidence that the controversy has spread to the trademark system can be observed in legislation such as the 1962 amendments to the Federal Food, Drug, and Cosmetic Act, concerning the type size of the generic name of the drug product which must appear on labels; the 1966 Report of the President's Consumer Advisory Council; the statements of Donald F. Turner, while directing the Antitrust Division of the Department of Justice, relating to a restriction on expenditures for advertising; and the implied criticism in such cases as *Borden,* holding that the private brands of evaporated milk were of like grade and quality with the manufacturer's brand, for Robinson-Patman Act purposes.

Uncertainties have arisen out of this type of controversy which present serious problems for the profession, and we seek to fill the gaps in existing knowledge in the studies of the Institute. Reports on our study on trademarks will be presented in this part, which will be moderated and commented on by Sydney Diamond and discussed by Mr. DeSimone.

Another area of the law in which a proper adjustment of conflicting policy would be in the public interest is in the interplay of unfair competition and antitrust doctrines, to which our attention will be devoted in the Second Session of the Conference. S. Chesterfield Oppenheim, the Adviser on Research of the Institute, is the Moderator-Commentator of the session. This session will consider three areas in which recent decisions of the courts have brought into conflict the remedies of intellectual property owners against unfair competition

and the application of antitrust law, which tends to dilute such redress. The objective of this session will be the development of criteria for harmonizing these doctrines to preserve intellectual property rights and, at the same time, maintain the effectiveness of public policy to prevent undue restraints of trade.

Since the end of World War II new developments, such as the phenomenal growth of research and development activity, have required new approaches to international trade and enterprise. The strong commitment of countries, both developed and under-developed, to rapid industrialization provides unusual opportunities for constructively extending the industrial property system. Internationally, technological knowledge has become increasingly important as a source of economic value and political prestige, and is capable of profoundly affecting relations between countries. Under such circumstances the role of industrial property in the transfer of technical information assumes new international significance. This subject will be the focus of our attention in the Third Session of the Conference.

A caveat is in order at this point: despite the fact that nations do not, necessarily, absorb all the ideas and techniques that are available from other countries (since all nations have cultural patterns of their own which, in the long run, they tend to perpetuate), it is no exaggeration to assert that the threat of political and cultural foreign domination is a serious consideration in many counries. The United States and other countries, accordingly, must carefully reevaluate their private and public interests relating to industrial property, in view of this most important technological transfer phenomenon which has become such an essential element in international cooperation.

The urgency of this reevaluation is evident in the charges, in some quarters, of our achievement of technological and industrial supremacy, and over our continuing benefit from a, so-called, "brain drain." Moreover, our need to reexamine the mode of doing business abroad is underscored by the continuing adverse balance of payments and the steady drain on our gold reserves. We appreciate, of course, that industrial property rights are only one of the factors concerned in the transfer of industrial technology from one country to another; however, the influence of industrial property is pervasive: it not only relates to problems of country-to-country access to technology, but also affects, though subtly, questions dealing with a country's shortage of capital, shortage of foreign exchange, and lack of entrepreneurship.

Although this session is concerned primarily with the problem of access to technology between countries for economic advance, and the role of the industrial property system in such access, it is indispensable

to an understanding of such international developments to inquire into the operations of the wide variety of legal and economic needs, institutions, and relationships that have evolved in different countries and groups of countries relating to technology transfer. This we hope to accomplish under the guidance of the Moderator-Commentator of this session, S. Delvalle Goldsmith of Langner, Parry, Card, and Langner, and a very distinguished cast of international specialists.

We trust that this Conference will generate ideas for further study by the Institute. The participants in all of the sessions of this Conference have been asked to direct their attention to available *factual* evidence on important issues, and to surface *problems* they believe require further study.

In view of the current interest in evaluating our patent system and identifying possible improvements in our international patent arrangements, the design of this Conference in a broad sense is intended to provide further perspective. We hope this type of examination of certain aspects of the industrial property systems, and the opportunity we afford interested persons to make constructive recommendations, based on the information gathered by this Institute and others, will provide a vital support and an evergrowing capability for the systems, as this Conference—and the continuing research and other activities of the Institute—demonstrate.

FIRST SESSION

Toward the Modernization of Industrial Property in the United States

Part I—Patent Outlook

DIRECTOR L. JAMES HARRIS: At the Ninth Annual Public Conference of this Institute, co-sponsored by the Commemorative Committee on the 175th Anniversary of the United States Patent System, the Moderator-Commentator of Part I of the First Session of today's Conference stated that the patent system "has become a political football." He went on to say,

> For one thing, it is taking too long and it costs too much to get a patent. . . . When you have people who are entitled to patents and do not get them; when you have people who are not entitled to patents and do get them; . . . when you have people concerned with the Patent Office spending too much money; [and] after you get a patent. . . . The chances of holding of validity of the patent vary with the circuit you are in . . .; this . . . causes this whole system to become embroiled in the political arena. . . . The patent system . . . has served us well. . . . I think it is high time that we have just the sort of meeting we are having today in which we will attempt to surface . . . problems . . . [and] suggested remedies . . . to the end that we can go forward with the patent system functioning as it should function in this year of our Lord, 1965.

Two months before the day the statement I just quoted was made, President Johnson had signed Executive Order 11215 establishing the President's Commission on the Patent System. I think it will be very interesting and informative to hear the views of our distinguished Moderator and Commentator in June, 1968, as he presides in Part I, on Patent Outlook, of the First Session of this Conference. It gives me great pleasure to introduce Judge Arthur M. Smith of the U. S. Court of Customs and Patent Appeals.

MODERATOR-COMMENTATOR SMITH: Thank you, Mr. Harris. If I had known your memory was so good I might have thought twice about coming today because I don't think there is much I can add in the year of our Lord, 1968, to what was said back in 1965.

It is, however, a pleasure to be here and to participate in this Conference. As you know, the general theme is industrial property. Our specific purpose this morning is to discuss the patent outlook. I have been thinking about this problem of patent outlook and studying patent problems for some 42 years now, first as a student, then as a lawyer and for the last nine years as a judge. After this time there is only one thing I can say with certainty about the patent outlook and that is, it is not entirely clear.

In 1926 when I entered the patent profession I had the ringside seat in the litigation of some rather important patents. My "ringside seat" was earned by doing the legal research for a capable lawyer. At that time there was nothing particularly sinister about having a patent. You might not be able to sustain them all, but as an institution in American life, as a piece of property which many companies and inventors considered to be of value, there was nothing considered out of the way in owning a patent.

In the early Thirties I began to note the emergence of the concept of the patent as a privilege. Along with this, at that time there was a growing emphasis on the concept of patents as a monopoly. Sure they are monopoly. They have been since the beginning of time. I don't think we can duck that. But to place the emphasis on the terms "privilege" and "monopoly" led to some very curious things, as many of you know, back in the Thirties and in the early Forties.

Courts began to find something very pernicious about a privilege of this sort. It was during the time that technocracy and the Congressional Committees all were pushing this theory and this concept and it led to the point where proposals actually were made for controls over innovation.

I have in my file an article from the *Rotarian Magazine*, not exactly a left-wing magazine, in which it was pointed out in the debate of the month that we ought to have "birth control for new ideas." The argument advanced for such controls was that we were having too many new ideas and this was the cause for the depression of the Thirties.

It was a fact that we had many inventions which no one quite knew what to do with and so the argument was that the best thing to do was to kill off invention. If you will remember this was during the period when we were killing off the pigs on the farms and plowing under the crops. It seemed to be that the prevailing philosophy of the time was

that scarcity would make the remaining items more valuable. I am glad we got over that bit of nonsense, although I sometimes wonder now whether we have ever recovered from the basic disease which led to a lot of these problems so widely discussed back in those days.

Fortunately the Patent Act of 1952 stated some workable tests and set up some new objectives to guide the Patent Office and the courts. I feel very privileged for the past nine years to have had a small hand in attempting to interpret it and to determine its meaning. The patent Act of '52 certainly is a step forward in the solution of the problem which we are discussing today.

We have a very distinguished panel of speakers on today's program and it would be presumptuous for me to attempt at this time to say anything concerning what I may or may not think about the patent outlook. As I looked back over the credentials of each speaker it occurred to me, however, that it might help in giving perspective to the discussion today, if I were to go back in history a little with respect to the objectives of the patent system.

I believe more certainly than in most any other phase of history, the patent system proves the adage that "the past is prologue." And I think we need to know something of this past before we attempt to assess the future and the changes which are proposed.

Our formal United States patent law probably had its beginnings on September 8, 1787, when David Bierly of New Jersey presented to the Constitutional Convention in Philadelphia five suggested amendments to the emerging draft of the Constitution. It was his fifth proposal which contemplated the creation of what some commentators have called "the creation of new federal power." That was the power to protect the works of authors and inventors. The proposal was adopted without recorded debate and Article 1, Section 8 was adopted. All subsequent U. S. patent and copyright laws have been based on this Section.

Back of this suggestion of David Bierly was, however, a long history of European, British and Colonial patents. All of these patents attempted to encourage innovation by the grant to the innovator of an exclusive right for a limited time. So we are dealing with an old phenomenon in the story of human history.

The basic concept thus was not at all new. What was new I think was the elevation of such grant to the status of a Constitutional right. Granted this right is not as spectacular or as newsworthy, perhaps, as some of the other political and personal rights which were also guaranteed by the Constitution, it has in the retrospect of the years, played a vital role in what we like to call the American way of life.

The philosopher, William James, has observed that "Mankind does

nothing save through initiative on the part of inventors, great and small, and imitation by the rest of us. These are the sole factors active in human progress."

I could not start a meeting either, I suppose, without referring to Abraham Lincoln. I think very seriously that Lincoln's speech in 1859 on "Invention and Discoveries" states something that we should keep in mind as we consider our patent law and the future developments in this area. He referred to the patent laws as being an invention and he said it was an invention of peculiar value. He then went on to point out that before these laws, "Any man might instantly use what another had invented so that the inventor had no special advantage from his own invention."

But, Lincoln said, "The patent system changed this, securing to the inventor for a limited time the exclusive use of his invention and thereby added the fuel of interest to the fire of genius in the discovery and production of new and useful things." I think, gentlemen. there, in a few words is the crux of everything I might have to say.

So, as we consider the patent outlook, I hope that these reflections on some of the past history of a very venerable system, will be of assistance as we ponder the problems.

Our first speaker will be John C. Green, member of the Research Staff of the Institute. Mr. Green is Project Leader for the series of studies which will be featured this morning. He has been concerned with government and industry and in evolving poll-taking techniques relating to industrial property for something over three decades.

As Project Leader he will describe the method and objectives behind the study. In addition he will discuss the two special studies in which he has been the major investigator.

I give you Mr. Green. (Applause)

JOHN C. GREEN

Thank you, Judge Smith. Perhaps I ought to start by describing what we tried to do and why we tried to do it.

First, let me say that after the Presidential Commission submitted its Report, a group of outstanding patent specialists closely associated with the Institute, comprising men of the caliber of Joe Jackson, and of Virgil Woodcock, got together with Mr. Harris and very strongly suggested that he tool up his activities to an examination in depth of

the Commission's recommendations.

At that time they made a series of assumptions which I think have proven sound and I would like to run over them. The first was that some of the recommendations were plain common sense and perhaps should have been adopted some time back. Therefore we should not devote too much attention to those.

Next that others would make sweeping changes in our historical patent system and we did not know very much about how these sweeping changes would impact on our society and there is where we should focus our attention. And third we might assume that the proposed legislation, which at that time many people thought was going to pass in a few days, would not pass in this Congress. And another assumption made was that the public debate which heretofore had been led by the Administration and by the patent profession would be enlightened if facts were submitted in addition to opinions. This might lead to a related assumption that a reaction limited to specific elements of our society would not provide a balanced picture of the overall effect of the recommendations.

They thought that the most profitable approach would be to attempt to estimate the impact of these recommendations on innovation in our society. In other words, they started from the premise that innovation was good, birth control of innovation is not desirable and that the role of the patent system is to encourage innovation.

Last, was the feeling that the bills were transient, but the recommendations were addressed to important and valid issues. Therefore the concentration should be on the recommendations with a view to providing permanent information which would guide the administration, the public and the Congress.

I might enlarge on that. We have been asked time after time why did you not address yourself to bill number so-and-so, or bill such-and-such. We felt first that the role of the University is not to be an advocate or critic of legislation. We also felt that the Commission was a group of able, competent, dedicated people and that they had surfaced important issues, issues that had been with us for some time and would be with us for some time. If we could provide some factual information, some objective estimates, we would help resolve the debate, we would provide some pertinent information of permanent value, because this is not the only Congress, and this is not the only Administration. In the patent system, as Judge Smith just observed, there is a tendency for questions to recur. It is of a cyclical nature.

As he observed, issues come up time and again and sometimes in a hostile atmosphere. Sometimes in an uninformed atmosphere. So we felt it desirable that the literature should be supplemented by factual

data responsive to the recommendations but attempting to analyze how they would impact on innovation in our society.

So, Professor Harris, when he got this charge, brought together his colleagues and advisors and asked them a series of questions, such as "Who are the innovators in our society? How do we reach them? How do we collect and analyze the findings, and how will we report them to the general public?"

They concluded that one would use the conventional team approach whereby a number of disciplines are merged. The Institute should bring together people with a legal background, a government background, also economists, statisticians and engineers and support them by a full-time university staff. This is what was done.

We were successful in getting Dr. Irving Siegel, Dr. Robert Bangs, Dr. Barkev Sanders, Mr. Gerard Weiser, Dr. Lou Harris, Dr. Finn, myself, and Mr. Van Arsdale, and originally we had Dr. Alexander at the Bureau of Standards. Regrettably he died and was replaced by Drs. Koller and Moshman. In other words, we put together a 10-man part-time professional staff. Then Lou Harris gave this staff two full-time employees, Mrs. Caulfield and Gideon Schmuckler. Mr. Schmuckler, who is in the audience, is a patent advisor at Technion University in Israel on sabbatical here. We have had the opportunity of doing a little for him and he has done a good deal for us.

The research group decided that we would poll the innovators. We would interview them. We would send out questionnaires. We would analyze the literature. We would develop case histories and from this we would distill the information which will be reported or at least the highlights of which will be reported this morning.

Now, who are these innovators? We felt that the man who makes the invention, the inventor is certainly an innovator. The patentee or licensee involved is another. The patent attorney, who protects the invention, is an innovator, the research administrator who manages a team of inventors in a company is an innovator. The executive who finances the invention is an innovator. Also the production engineer who has to produce the device at a price has a concern with the innovation.

Then foreign experts, men aware of the limitations and values of other patent systems, have useful information. Also foreign inventors who have chosen the U. S. patent system and see some special importance to them here, should be considered as well.

Now, that was our first universe of innovators. Then Earl Stevenson, who is in the audience, said, "You have neglected the public sector." The patent system does serve industry, but the government agencies

and universities have a role, so we enlarged the activity to include them. Then as we went along we found there were a few topics which we thought merited attention, but which did not fit quite this approach.

One, shall we say, is the costs and benefits of interferences. In other words what are the net values of interferences? Another complex question is, that of appropriate industrial protection for computer programs. For these special projects we were fortunate in getting Mr. Van Arsdale and Dr. Alexander. The latter effort was picked up by Drs. Moshman and Koller after Dr. Alexander's death. We hope to hear from them, not this morning but later this summer.

In view of the time schedule, we are going to give you a series of highlights by some of the investigators. Not all members of the team will report this morning, but a few of us will undertake in this abbreviated time to report what they have discovered. Then we will have your editorial board take over.

We felt that the scientific process required, before writing up what was found, an exposure to experts for their analysis. We thought we would do this in open court. So, we have today a carefully chosen panel who represent industry, government, academic institutions, inventors and patent expertise. Hopefully, at or about 11:00 o'clock, the program will be taken over by them. They will give their reflections, observations, and experience.

This will go until lunch, when Dr. John Kincaid, Assistant Secretary for Science and Technology, will be your speaker. We will come back after lunch and if we are on time, there will be ample time for questions and answers from the floor.

With that prelude, I think I will turn back to Judge Smith.

MODERATOR SMITH: Hopefully, we will have time for some questions and answers and I think it would be helpful in organizing the questions that you have and getting them to the right members of the panel for answers, if you would be good enough, please, to write your questions and deliver them to me and I will see that we get proper experts to deal with the question for you.

Our next speaker is no stranger to those who have attended the other meetings of the Research Institute. Dr. Irving Siegel has been a member of the Research Staff, he is a Principal Consultant to The Patent, Trademark, and Copyright Research Institute, a member of the senior staff of the W. E. Upjohn Institute for Employment Research. As

I am sure many of you know, Dr. Siegel is the author of numerous monographs and articles on economic, technological and statistical subjects.

Dr. Siegel will speak to us now on the subject of the company executives. Dr. Siegel.

IRVING H. SIEGEL

Thank you, Judge Smith. My experience is that when I read it takes less time than if I try to summarize what I would otherwise read. Today, to help the schedule a bit, I shall read.

Before I do so, however, I should like to tell you that the W. E. Upjohn Institute, with which I am associated, is not connected with the pharmaceutical company, although it does proceed from a trust fund set up by the company's founder. Often confused as a member of the pharmaceutical company, I nowadays tend to relax, to accept with resignation the identification, and to whisper furtively, secretly: "Haven't you heard what we are working on?" I am told: "No, what?" Then I say: "The unemployment pill." This exchange is helpful, satisfying.

Recently, I decided instead to point out that we at the Institute are working on a demographic drug which will be very useful in controlling employment and unemployment problems in the future; a drug which is acceptable to every church. It is a pill for libido control. It is called "programmed yearning."

Today, I present the salient findings of a questionnaire survey of the views of executives of medium-size companies on various recommendations made in the November 1966 Report of the President's Commission on the Patent System. The survey is one of several conducted by The PTC Research Institute to assess the implications of that Report. By definition, each of the companies included in our study employs not more than 1,000 persons, although it has annual sales of at least $1 million.

Before proceeding further, I acknowledge the collaboration of, and my debt to, Gideon Schmuckler, Patent Coordinator of Technion Research and Development Foundation in Israel, who has been associated with The PTC Research Institute for the year 1967-68.

My remarks are based on replies of executives of 70 companies, roughly twice the number of replies covered in a preliminary paper prepared for an issue of *IDEA* now in press. The 70 companies constitute a fifth of the 356 medium-size firms to which questionnaires were directed. All the canvassed companies had some previous experience with the patent system; all were known in advance to have had at least one patent assigned to them in 1964 or 1965.

The responding executives may be presumed to have a deeper than ordinary familiarity with, or interest in, patents. In addition to being knowledgeable, they must have been unusually motivated, inasmuch as they completed a long questionnaire concerning details that executives might often be expected to shrug off as recondite legalisms, as matters more suitable for contemplation and disposition by company specialists down the line.

I wish to state, furthermore, that the response rate is comparable to those recorded for earlier surveys made by me concerning the patent behavior of smaller firms.

The first set of questions addressed to company executives relates to Recommendation I, which briefly proposes:

(1) Patent grant on the first-to-file, rather than the extant first-to-invent, principle;

(2) Abolition of the present grace period;

(3) Making of worldwide public information (including public use or sale) a "reference"; and

(4) Abolition of interference proceedings.

As a background against which to interpret the replies to queries relating specifically to Recommendation I, additional information was solicited. From the information obtained, the following profile emerges: The companies that generally had experience with interference proceedings; are overwhelmingly reluctant to publish either the ideas of their personnel or presumably patentable inventions before the filing of applications; typically scan patents of a target field before they undertake research or development projects; and are evenly divided at present on the need for special steps to safeguard patent rights in countries having no grace period.

A very large majority of the 70 executives (57 out of 68 responding to the question) believed that enactment of a first-to-file provision would lead to a tightening of company security precautions. Furthermore, enactment of this provision would probably increase the volume of applications. At least, this was the view of 34 of 50 respondents who ventured an opinion; and only 5 out of 32 responding to another query expected the enactment of the provision to reduce the number of

applications. On the other hand, a further probe, eliciting only 41 replies, indicated that 27 expected no change in the number of applications.

Other inquiries concerning the first-to-file principle indicated that most of the companies would not make any change in the kinds of laboratory records they maintain. On the other hand, a predominant majority (60) would file patent applications earlier than they now do; and a smaller majority (42 out of 64 responding) would file patent applications for ideas before vigorous subjection to laboratory trial.

An effort was made to ascertain if establishment of worldwide information as a reference would stimulate or discourage patent search abroad before the filing of a U. S. patent application. Stimulation would be the natural preference for companies wishing to rely on the patent system and having the economic resources to do so. On the other hand, the economic burden could make reliance on trade secrets more attractive for medium-size companies (and smaller ones) and also slow their release of technical data. A virtually even division was recorded among respondents, with most executives (63) expressing an opinion. Specifically, 32 repondents expected their companies to make worldwide searches, and 31 did not—as three additional respondents said they did not know, and as the four remaining executives ignored the question.

The main conclusions that seem to emerge from the battery of questions regarding Recommendation I are these: Medium-size companies, already reluctant to release technical information freely, would probably guard their research activities even more closely. Nevertheless, adoption of the first-to-file principle would probably increase a proneness to file early and often (within economic limits) and thus place a heavier burden on the Patent Office.

Recommendation II would substitute "preliminary applications" for the "grace period." To aid in evaluation of the impact of the substitution, we first ascertained that the overwhelming majority of respondents (65) use the services of outside patent attorneys; that, indeed, only about one-fifth (17) of the companies have their own patent departments; and that most firms rely, in any case, on patent attorneys to draw up patent specifications. In the event the law is changed, a large majority of the companies (58) expect to file preliminary applications, and most companies (47) would hesitate to rely on persons other than patent attorneys for the preparation of such applications.

Recommendation V would simplify the management of inventions resulting from company research and development activity. Most of

the companies have had no difficulty in persuading inventors to sign patent applications, and a similar high proportion had experienced no difficulty in locating inventors. Furthermore, few (17 out of 50) reported difficulty in determining the actual inventor. The respondents were almost equally divided, however, when asked, "Would your company generally prefer to file a patent application without delay as assignee and see later to the submission of documents concerning the actual inventors?" (Although nine were undecided or indifferent to this question, 29 respondents said "yes" and 32 said "no.")

Recommendation VII involves publication of information not now revealed that is contained in an unexamined or partly examined patent application. Varying majorities of the respondents would make use of this new opportunity to obtain technical data. They would search such published applications before filing their own preliminary or complete applications in order to learn what others are doing, and to guide their own efforts. An even decision was recorded (32 for, 32 against), however, with respect to a search for the purpose of approaching inventors or assignees for rights.

If Recommendation VII were adopted, somewhat more than half the respondents (36 out of 68) would make a careful search before filing. Few of them (24 out of 64) would apply for fewer patents. A large majority (50 out of 68) however, would place greater reliance on keeping inventions confidential.

Recommendation XI proposes introduction of the "opposition procedure"—which in effect, invites the public to cite any pertinent prior art after completion of the Patent Office's own examination of an application. Slightly more than half of the replies to a question (33 out of 64) indicated that a more careful search of prior art would be made than is made currently in advance of filing—to reduce the chance of opposition.

Recommendation XV concerns the Patent Office's right to amend or cancel claims in issued patents in the light of additional prior art brought to the attention of the Patent Office within three years. More than half the respondents (38 out of 70) would consider increased reliance on secrecy, in lieu of patent protection to avoid cancellation. Most (43 out of 66) would make better searches before filing. With respect to patents owned by others, however, a clear majority (46 out of 64) would take advantage of the opportunity to present additional pertinent information to the Patent Office.

I have one more recommendation to tell you about, Recommendation XVII, which concerns damages for infringement prior to patent issue. Most of the respondents (38 out of 62) think they would not act

differently if they received an infringement notice before patent issue, than if the notice concerned claims at issue of patent. On the other hand, if the company's own patent applications were at stake, advantage would be taken of this recommendation by a clear majority (42 out of 58 in the case of a process and 46 out of 61 in the case of a machine, manufacture or composition of matter).

Now, in closing, I want to read almost verbatim the last two paragraphs of a paper being published in the forthcoming issue of *IDEA*.[1] Even though this paper was based on a small sample, on about only half of the replies incorporated in the findings I report today, the two paragraphs summarize fairly well the dominant mood of the senior executives of all the canvassed medium-size companies.

On the whole, the respondents to the questionnaire cannot be characterized as enthusiastic about the changes proposed by the Commission. The general mood is cautious skepticism rather than cautious optimism; and although indifference may occasionally be shown, as in the case of interim liability, definite antagonism to some proposals emerges for example, with respect to the first-to-file principle and inclusion of worldwide information in the prior art. Simplifications are welcomed, but respondents become ambivalent when they visualize possibilities of deprival as well as benefit that are latent in proposed improvements. They exhibit understandable sensitivity with respect to their competitive position, costs, equity, uncertainties and delays. They suggest or emphasize perverse and inadvertent potential effects, such as increased Patent Office workloads, lower patent quality, a higher incidence of infringement and litigation, enforced retreats toward trade secrecy, and new impediments to the flow of technical information.

The general reaction of the respondents may be no different from that evoked by recommendations for fundamental change in any long-established system with acknowledged defects requiring remedy. Attempts to solve old problems, however, also engender new problems, as experience shows and as businessmen are so alert to project. On the other hand, experience also shows that substantial changes in systems can be assimilated, that businessmen and others can "learn to live with" revisions that at first they do not favor or even openly oppose. When extensive alterations are proposed for established institutions, common sense suggests that a count be taken of whatever early

[1] Irving H. Siegel and Gideon Schmuckler, "Executive Views on Presidential Commission's Patent Recommendations: Medium-Sized Companies," *IDEA*, Vol. 12, No. 1 (Spring 1968), pp. 617-630.

evidence can reasonably be gathered with regard to prospective net outcomes. It was the purpose of my report today to present such evidence—in the guise of informed opinion of sampled members of a group that would definitely be affected by the adoption of recommendations of the President's Commission on the Patent System. Thank you. (Applause)

MODERATOR SMITH: Thank you, Dr. Siegel.

Our next speaker is Dr. Robert B. Bangs, who received his Ph.D. from Brown University. He is listed here as economist and civil servant, currently with the Department of Commerce. Dr. Bangs has previously been associated with the Treasury Department, with the Federal Reserve System and is a former advisor on finance to several foreign governments. Dr. Bangs is going to give us the report on U. S. inventors.

I could not help but wonder about this connection between economics and high finance and U. S. inventors. It seems to me there is a bit of anachronism in the association. I now present Dr. Bangs.

ROBERT B. BANGS

In our division of labor, since this is team research, the public with which I have been concerned is active practicing inventors.

Our approach, which was based on mail questionnaires supplemented by strictly limited personal interviews with a small sample of mail respondents, sought primarily to get at the operational significance of the Commission's recommendations. It was not an opinion survey of how inventors felt about the recommendations, although we obtained a good deal of opinion as a by-product. It was rather an inquiry into how inventors would modify their practices and their operations if the recommendations were to become law. We felt that what inventors would do might in some respect be more meaningful than what they thought.

The questionnaires were circulated to the names based on lists supplied by the Patent Office and other sources; and consisted of

inventors who had received multiple patents during a recent 10-year period—in other words, productive consistent contributors to advancement in the useful arts.

We received nearly 200 usable replies, a small sample, but one well balanced between employed and independent inventors, as well as geographically and among the various fields of technology. We consider this sample broadly representative, but of course, not 100 percent accurate in describing the universe it represents.

I assume you were all familiar with the general nature of the Commission recommendations, so I shall refer to them only in an abbreviated form. We did use the actual language of the recommendations in obtaining our responses from inventors. We did not try to cover all the recommendations made by the Commission, but concentrated on nine of them that seemed most significant to inventors. The detailed and thoughtful replies we received on many of our returns attest to the fact that the issues are important and that they touch inventors deeply.

Their expressions of both approval and disapproval were strong and cogent. Their reaction to proposed revised procedures were in some cases surprising. We are extremely grateful to these inventors, busy people all, who responded so generously to our detailed questions. Whatever merit this study has is attributable to the judgment, experience and insight which our respondents shared with us.

The first thing to be said about the survey results is the wide diversity of opinion and of reaction it produced. One would expect such a group of proven inventors, being independent spirits, to yield a broad spectrum of opinion and to exhibit a high degree of novelty in adjusting to a changed environment. It is precisely these qualities of mind and these habits of problem solving that make them what they are.

But the diversity of opinion was only one characteristic of the responses. Another was a substantial consensus that the existing system should be changed, if at all, only after the most careful consideration. Inventors as a group showed surprising conservatism toward the whole issue of patent system reform. They were greatly concerned lest their legal and other expenses might rise under the proposed procedures and that they might lose some measure of control over their inventions.

The first group of Commission recommendations dealing with first-to-file, abolition of the one-year grace period, and redefinition of prior art to include worldwide information, was generally regarded by our responding inventors as portending significant changes in their

methods of operation. Sixty-one percent said they would change their practice if these recommendations became law. Twenty-six percent said they would not. Eight percent were uncertain.

The great majority who would change their practice would do so by filing earlier than they now do and by filing more applications with broader claims than at present.

The recurrent theme in these responses was that filing would be necessary on incomplete ideas, on inventions that were not commercially feasible and on conceptions that for various other reasons were now abandoned before filing. Independent inventors were more certain they would change their practice than were employed inventors. The latter group nevertheless felt quite generally that their employers' patent departments or patent counsel would feel obliged to file earlier and more frequently in numerous cases.

The theme of earlier and more frequent filing occurred in 69 percent of the cases where reasons for changing practice were given. Another 13 percent of these responses said that inventors would maintain greater secrecy under the proposed system than they do now. Fourteen percent said the proposed system would mean greater expense to them. It was apparent from these responses that the existing grace period was widely used to test both the technological soundness of inventions and their commercial potential. It was also evident that this testing resulted in a considerable attrition of presumably patentable ideas that do not mature into actual patent applications under the present system.

The majority of articulate inventors consider this attrition a good thing since it results in more solid applications for them and less work for the Patent Office.

Those inventors who would practice greater secrecy under the proposed system would do so both in publication and in negotiations. Inventors who hope to license their ideas for royalties felt they could no longer do so until they had filed, whereas now they often enter into these negotiations before filing.

In many cases they felt this would delay the process by which an invention becomes translated into an actual innovation and production.

In brief, the majority of inventors in our sample do not see these recommendations as either helping to streamline Patent Office procedure or as strengthening the protection available to them. Rather they see the recommendation as putting pressure on them to be hasty and less thorough and as burdening them with the greater need for secrecy and greater expense.

On the recommendation to substitute a preliminary application for the present grace period, at least 80 percent of inventor replies said they would use this procedure if available even though they did not favor it.

Among the responding group 62 percent felt that if this procedure were in effect they would alter their customary practices significantly, generally to file more applications. Thirty-two percent would not alter their present practice appreciably, although many would use the preliminary application.

A significant group of inventors who did not favor the first-to-file system nevertheless felt this recommendation for preliminary applications partially met their objectives and that it would provide a framework they could live with, even though they would rather see the grace period retained. A majority of this group commented about the large number of preliminary applications they and other inventors would file under this system and, about the substantial fraction they would not follow up, and about the difficult diversion of their time from perfection of an invention to filing preliminary applications.

Although we did not get a specific reaction on this point, one may infer from our responses that the administration modified recommendations on first-to-file as outlined by Commissioner Brenner to the House Judiciary Subcommittee on February 28, would probably be fairly well received by a majority of inventors. As you know, these recommendations would retain the grace period, would cut out preliminary applications, but would limit interference proceedings to acts within one year of the first filing date.

Estimates of the volume of preliminary applications under the Commission's proposed system varied widely, but the modal conjecture by inventors was that this volume would about double. Generally speaking, inventors find it difficult to see how doubling the volume of applications would expedite Patent Office procedure.

Doubtless, many of them visualized novelty searches as making substantial progress while applications were still in preliminary form. On balance, no great enthusiasm for the preliminary application was manifest among responding inventors, but many thought they could use it if requirements as to form were truly minimal. Many of these preliminary applications would be purely defensive.

On Commission Recommendation V, to simplify the formalities in filing patent application, little opposition was expressed by our respondents. Eighty percent would make no change in their present procedures if this recommendation were effective. Twenty percent who would change were primarily employed inventors who envision

fairly inconsequential changes in procedure within their companies.

On the recommendation to publish pending applications at a definite interval after first filing, 60 percent of the inventors said this would have no effect on their present action while 33 percent said it would. Generally, those who would change, would see that their applications were more carefully worded so as to be less revealing to others.

In a few cases inventors thought publication prior to issuance might discourage others from working along the lines they had already followed successfully.

Concerning Recommendation XI, for Patent Office reconsideration of previously allowed claims, 64 percent of the responding inventors would not change their practice. Thirty-one percent would, generally by monitoring pending applications, their own and others, more closely. Some inventors felt this provision could be used aggressively.

One reply stated with some candor, "We would actively engage in the practice of attempting to narrow the scope of our competitors' inventions." Other comments felt only large well financed corporations could afford to do this.

On the recommendation to amend or cancel claims in already issued patents, 65 percent of the inventors would not change their procedures and only 27 percent would. A number of respondents felt this recommendation would generate more activity in attacking and defending claims. Another group saw this primarily in terms of additional expense to themselves.

Concerning damages for infringment prior to issuance of the patent, the pattern was roughly the same. Sixty-five percent of inventors would make no significant change in current practice, 25 percent would. Generally a change would be made only where licensing is involved. There was considerable feeling that this recommendation would make negotiations for licensing more difficult and perhaps increase willful infringement, since the infringers' liability would be limited, in fact, to reasonable license fees.

Some inventors considered this a step toward compulsory licensing, which naturally they do not favor.

On extending the term of patent to 20 years from first filing date, the typical response was this would make little practical difference. A minority, however, felt that this would effectively shorten the term of some of their most valuable patents. Several inventors said their best patents had been tied up in the Patent Office a long time before issuance. In some cases the patent owner is quite content to let issuance be delayed while commercial applications of the invention are perfected.

I have been able in this brief time to give only a skeleton summary of how inventors feel and what they would do about these recommendations. In general it would appear they are far from persuaded about the value of a number of them and fairly reluctant to depart from the existing rules with which they are familiar. This is the rather surprising strand of conservatism in their views to which I alluded earlier.

This oral summary cannot do justice to the variety and texture of opinion obtained in the surveys. In a forthcoming issue of *IDEA*, we will give a fuller and better documented story of how inventors are reacting to these Commission recommendations. That they are reacting, and not always favorably, is plain.

Thank you. (Applause)

MODERATOR SMITH: I would remind you again there is a question and answer period scheduled for this morning's session. There has been a little change in the procedure. The young ladies, who are being helpful here at the meeting, will pick up your questions and deliver them to me so you won't have to leave your seats. So if you have questions, send them up. Our next speaker is Dr. Barkev S. Sanders, who is a consultant to the University of Pittsburgh Graduate School of Public Health and to the United Mine Workers Welfare and Retirement Fund. He is a principal investigator on the Institute's Research Staff and is presently at work on another random report in comparative patent yields for government-supported research and development versus research and development financed by industry itself, which should be a very interesting subject.

Dr. Sanders is a statistician and actuary, and among his many professional associations he is a lecturer at Johns Hopkins University School of Medicine and other universities in the Washington area. He is a research consultant to the U.S. Public Health Service and a consultant to the Bureau of the Budget.

Dr. Sanders has published nearly 200 papers, articles, pamphlets, and books on various subjects, including sickness, injury and health insurance, manpower problems, selective service, criminology, labor force, family composition and patents. He will speak to us at this time on the subject of probable consequences of some of the Commission's recommendations.

Dr. Sanders.

U.S. Patent Assignor (Inventor)—Assignee Study

BARKEV S. SANDERS

In a small number of interviews I had with inventors, for the purpose of getting their attitudes and anticipated behavior if the various changes recommended by the Commission were to be enacted into law, I found diametrically opposed views on different recommendations by different inventors. I also found, at least in some cases, that these views were rather shallow and evanescent, subject to change when some plausible consequences that might flow from the changed legislation were pointed out and discussed with the inventor. Usually the response was that angle or that possibility, which they agreed seemed plausible, had not occurred to them.

Indirect evidence, based on present practice that in all probability will be radically modified if the Commission's recommendations are implemented, seemed to me perhaps a more meaningful criterion for certain recommendations. I therefore concentrated my efforts on a mail questionnaire seeking corporation and inventor replies to questions such as: What was the lapse of time from conception of the idea for the new invention to its development to a stage where a patent application could be filed? What laboratory and other tests were used to validate the utility of the new invention and for how many months? Was the patented invention put to commercial use and did such use begin before the filing of the application or after? and so on.

In pursuing this course of research I had multiple interests:

(1) I felt that some of the information would have a direct bearing on the probable consequences if some of the Commission's recommendations were to be implemented by law, and that such indirect information would be more pertinent than direct questions put to inventors on the merits or demerits of these recommendations.

(2) I also felt that the new inquiry would aid in appraising the validity and the relative precision of my earlier work for the Institute under the umbrella title of "Patent Utilization Studies," which in my view was never completed since we did not have the opportunity to ascertain statistically the extent and nature of the

bias introduced in our findings as a result of the non-response.

(3) Lastly, I believed that to assess objectively the influence of various changes in our patent law on the system we needed a patent quality index. Such an index has not been available in the past, though it is possible to develop one in terms of the proportion of patents issued to U.S. residents that are also patented abroad and kept in force for a varying number of years by periodic payment of maintenance fees in countries where such fees are required. Also the number of countries in which a specific invention is patented is in itself an indication of the invention's economic worth in some measure. I am of the opinion that inventions which are maintained by payment of periodic maintenance fees are those that are in profitable commercial use.[1] The present study is hopefully to be extended to test the validity of this hypothesis by relating the maintenance of patented inventions abroad in countries which require such maintenance fees with their utilization status as reported by assignees and inventors of these patents. By the same token the significance of the number of countries in which an invention is patented can be tested for utility as an index of the quality of invention in terms of its economic effects.[2]

By necessity data for the study were obtained through a mail questionnaire. The sample was taken for patents issued to U. S. residents during 1966. A 2 percent sample was used by mailing questionnaires to all inventors and assignees, if there was an assignee, who received a patent in 1966 wih terminal digits of 13 or 38, selected from a table of random numbers. The returns represent roughly 50 percent of all those canvassed. The questionnaires in many respects are patterned after those used earlier for the "Patent Utilization Study." The returns are still being analyzed at this time. Subsequent follow-up questionnaires of a different type and content will be sent to assignees and inventors to obtain information on the maintenance of these

[1] Sanders, Barkev S., "Trends in Invention Here and Abroad," *PTC J. Res. & Ed. (IDEA)*, Vol. 6 Conference No. (1962), pp. 32-35 and Charts, pp. 147-153; "The Upgrading of Patented Inventions and Their Use Here and Abroad," *PTC J. Res. & Ed. (IDEA)*, Vol. 7, No. 1 (Spring 1963), pp. 45-83; "The Upgrading of Patented Inventions and Their Use Here and Abroad," Continuation, *PTC J. Res. & Ed. (IDEA)*, Vol. 7, No. 2 (Summer 1963), pp. 185-228; "Trends in Invention: U.S. and Abroad," *PTC J. Res. & Ed. (IDEA)*, Vol. 7 Conference No. (1963), pp. 85-88; "Comment" [on "A Statistical Analysis of Patent Renewal Data for Three Countries" by Thomas Dernburg and Norman Gharrity], *PTC J. Res. & Ed. (IDEA)*, Vol. 5, No. 4 (Winter 1961-62), pp. 361-368.

[2] Sanders, Barkev S., *IDEA*, Vol. 11 Conference No. (1967), pp. 112-125, Tables A and B, at pp. 119 and 121.

patents in countries requiring maintenance fees, correlating this information with the information on utilization of the sampled patent.

Another innovation in the present study was that this time questionnaires were also sent to foreign inventors of sampled patents—i.e. those who received U.S. patents with terminal digits of 13 or 38. Some suggestive comparisons may be possible with this information from foreign inventors.

A few preliminary tabulations of the replies from assignees and inventors bearing on some of the Commission's recommendations, such as substituting the first to file for the bona fide inventor, where the two are different, and the elimination of the grace period, have been completed and will be presented and discussed briefly.

Tables A-1, A-2, and A-3, appended, illustrate one aspect on which I commented in the course of last year's PTC Conference. Table A-1 is based on assignee replies for 142 assigned patents. All of these patented inventions were reported as having been put to commercial use.[3] Of this total, 117 were reported as in current use, and the balance had been used in the past. For 18 of the 117 patented inventions reported in current use the date when the commercial use began was not reported. For the 99 this information was reported and the date of use, in relation to the date on which the patent application was filed, is shown by Table A-1. It is seen that for about 50 percent the commercial use began before the application was filed. In less than 50 percent the commercial use began after the filing of the application. Considering all patents put to commercial use, for which the necessary information was obtainable, we find that for 52 percent the use preceded the filing, in 5 percent both events took place within the same month, and we do not know which preceded the other in time, and only for 43 percent the commercial use definitely began after the filing date. These statistics suggest a materially higher proportion of used patented inventions for which the commercial use began before filing in comparison to statistics derived from our earlier study based on patents issued in 1938, 48 and 52. Just what the significance of this difference is remains to be determined with further study and analyses of the returns.

---

[3] "Commercial use," was defined both for inventor and assignee questionnaires as follows:

> **Please answer regardless of the extent of use. A patent is considered used commercially if it is sold to a company, is produced for sale, is used in the production of some other item, or royalties are received under a license. In other words, this includes the making, using or selling of the patented product or the utilization of the patented process for which the maker, user or seller would be liable for infringement under the claims of the patent had he not been the patentee, the assignee or licensee of the patent.**

As I have pointed out in the past,[4] commercial use of patented inventions before a patent application has been filed suggests that a large proportion of patentable inventions never become patents because their commercial potential proves deficient to the inventor or the assignee. It would appear, therefore, that the first-to-file provision and the elimination of the one-year grace period recommended by the Commission, would markedly increase the annual number of patent applications filed, thus overburdening the Patent Office rather than relieving it, contrary to the assertions of the Commission. There is no indication that the Commission tried to obtain objective data on the basis of which to appraise the probable effects of its various recommendations—it rested on prestige instead of well-established empirical facts.

Table A-2, based on inventors' replies for assigned patents is consistent with Table A-1, based on assignee replies, thus strengthening the validity of these findings.

This prepatenting trial of market potentiality is not restricted apparently to assigned patents, it seems to be almost as prevalent for unassigned patents as shown by Table A-3.

The confirmation of this finding has other implications. Some patent statisticians, overlooking the non-comparability of patents as a unit measure of inventiveness, have made generalizations on the comparative inventiveness of different nationals on the basis of per capita patent application. A former Charles Kettering Award recipient, the late Frank A. Howard,[5] raised this question: How to account for the fact that despite our comparatively much higher R&D expenditures our per capita patent applications are only a fraction of the number of such applications filed by residents of Switzerland, Sweden, Germany and, to a lesser extent, a number of other European countries. As P: J. Federico and I have indicated in the past,[6] there are a host of reasons which could account for this apparent anomaly; in all probability, the first-to-file requirement, which is common to all these countries,

[4] Sanders, Barkev S., "Speedy Entry of Patented Inventions into Commercial Use," *PTC J. Res. & Ed. (IDEA)*, Vol. 6, No. 1 (Spring 1962), pp. 87-116; "Will Proposed Legislation Deriving from the Report of the President's Commission Meet the Challenge?" *IDEA,* Vol. 11 Conference No. (1967), pp. 112-125.

[5] See Howard, Frank A., "Patents and Technical Progress," *PTC J. Res. & Ed. (IDEA)*, Vol. 4 Conference No. (1960), pp. 57-66.

[6] Sanders, Barkev S., "American Inventiveness v. Foreign Inventiveness," *PTC J. Res. & Ed. (IDEA)*, Vol. 5, No. 2 (Summer 1961), pp. 114-129; "Trends in Invention Here and Abroad," *PTC J. Res. & Ed. (IDEA)*, Vol. 6 Conference No. (1962), pp. 32-35, 147-153; Federico, P. J., "Comparative International Patent Statistics," *PTC J. Res. & Ed. (IDEA)*, Vol. 6 Conference No. (1962), pp.37-42, 154-156.

is one of the most important variables accounting for the higher per capital patent application rate for these countries as compared with the United States.

To protect his invention, the inventor, in most foreign countries where first to file is the practice, rushes to the Patent Office as soon as he has an invention; once the application is filed he is more apt to persevere until a patent is obtained and often abandons it when the first maintenance fee becomes due. In the United States, on the other hand, the inventor or the assignee more often before filing a patent application may try to ascertain the market potential of the invention before deciding whether to patent it. As a consequence, many potentially patentable inventions are first explored as to their market potential and abandoned if they fail to measure up to expectation; in other instances the inventor or the assignee not being under the pressure to file immediately bides his time until the initial ardor for patenting dies down and no filing occurs. In the "Patent Utilization Study," we found that three-fourths of the inventors, when questioned, indicated that they had patentable inventions for which for one reason or other they chose not to file.[7] (Applause)

[7] Sanders, Barkev S., *IDEA*, Vol. 11 Conference No. (1967), pp. 112-125, Table D, at p. 123.

APPENDIX

TABLE A-1

PATENTED INVENTIONS PUT TO COMMERCIAL USE RELATING THE MONTH IN WHICH USE BEGAN TO THE DATE OF PATENT APPLICATION (BASED ON ASSIGNEE REPLIES)

Time of Use to Time of Filing	In Current Use		In Past Use		All Patented Inventions Put to Use	
Before Filing	48	48.5%	13	72.2%	61	52.1%
Within Same Month	5	5.1%	1	5.6%	6	5.1%
After Filing	46	46.5%	4	22.2%	50	42.7%
Unknown	18	—	7	—	25	—
Total (Known)	99	100.0%	18	100.0%	117	100.0%
Aggregate Total	117	—	25	—	142	—

TABLE A-2

ASSIGNED PATENTED INVENTIONS PUT TO COMMERCIAL USE RELATING THE MONTH IN WHICH USE BEGAN TO THE DATE OF PATENT APPLICATION (BASED ON INVENTOR REPLIES)

Time of Use to Time of Filing	In Current Use		In Past Use		All Patented Inventions Put to Use	
Before Filing	123	51.0%	33	57.9%	156	52.3%
Within Same Month	17	7.1%	2	3.5%	19	6.4%
After Filing	101	41.9%	22	38.6%	123	41.3%
Unknown	22	—	11	—	33	—
Total (Known)	241	100.0%	57	100.0%	298	100.0%
Aggregate Total	263	—	68	—	331	—

TABLE A-3

UNASSIGNED PATENTED INVENTIONS PUT TO COMMERCIAL USE RELATING THE MONTH IN WHICH USE BEGAN TO THE DATE OF PATENT APPLICATION

Time of Use to Time of Filing	In Current Use		In Past Use		All Patented Inventions Put to Use	
Before Filing	14	48.3%	2		16	45.7%
Within Same Month	1	3.4%	0		1	2.9%
After Filing	14	48.3%	4		18	51.4%
Unknown	6	—	2	—	8	—
Total (Known)	29	100.0%	6		35	100.0%
Aggregate Total	35	—	8	—	43	—

MODERATOR SMITH: Thank you, Dr. Sanders. I apologize to you for having to suggest that we do have a time schedule that we are supposed to meet. Unfortunately, we are running behind.

Our next speaker is Gerard J. Weiser, member of the Research Staff, who is a partner in the firm of McClure & Weiser of Philadelphia. He is a graduate of Temple University Law School and previously attended Pennsylvania University where he obtained his B.S. degree in 1948. He is a frequent lecturer at The George Washington University. He is a member of the Philadelphia Patent Bar Association and other associations, the author of numerous articles and periodicals and journals published both in the United States and abroad.

GERARD J. WEISER

Judge Smith, Gentlemen, after this admonition by the court to keep to a time limit, I will certainly try to abide by this ruling. It may be noteworthy that in reviewing the historical development of patents, Judge Smith pointed out that until 1930 we were in the clear and it was then a privilege to own a patent.

I think in this Conference this morning we have now reached the Dark Ages. The lights have turned out at about this point, the air conditioner has also gone out, and maybe we will make out of patent law something surreptiously to be talked about!

The analysis of the foreign questionnaire directed to foreign experts with which I am concerned is not the one dealing with foreign inventors that was mentioned before. The present analysis dealt with foreign experts in France, Germany, Switzerland, Holland and Denmark. The experts were foreign officials of the respective governments, of private practice, and members of the patent departments of large and medium European corporations.

A preliminary report on these interviews was published in the fall of 1967 by Dr. Harris in Volume 11, Number 3, page 289 of *IDEA*, the journal of the Institute, to which you may wish to refer.

For the purpose of stimulating your questions, and those of the panel, to which we will be subjected in a few moments I would like to touch on the areas which were investigated, to let you know that we do have some answers to our problem areas and that we have been able to

draw some conclusions from these answers; but I will not discuss them here in view of the limitation of time.

We did investigate, of course, and submitted questions to these foreign experts on the topics of first-to-file versus first-to-invent systems, advantage and disadvantage of each, the legal rights of the inventor and the rights of the first to file. We investigated the question of early publication (advantages and disadvantages), international cooperation (areas and necessity), the need for harmonization, the grace period, evaluation of the invention prior to filing, absolute novelty and examination (relative advantages and disadvantages), foreign public knowledge, use and sale included as priority, opposition, cancellation and novelty proceedings, deferred examination, preliminary applications, and protection against importation.

If there are any questions you may wish to submit on these areas, we do have some preliminary suggestions and some answers.

The President's Commission Report on the United States patent system submitted recommendations aimed at harmonizing certain aspects of proposed U. S. patent laws with European patent legislation. The Report placed great weight on certain aspects of the foreign patent laws and the desirability of harmonizing the U. S. laws with them.

The purpose of the questionnaire was therefore to find out what were the reasons for the existing European patent legislation, whether economical, sociological or legal; what were the reasons for the present changes in the law and the trends. Once these reasons were determined, we attempted to determine whether the European patent law aspects with which the President's Commission recommended harmonization were applicable to or suitable to the U. S. industrial system and its needs.

We thus attempted to determine if these aspects of foreign law could and should be applied rationally to the economic, legal system of the United States.

As a general observation, it is most noteworthy that in answering the questions submitted, European experts disclosed the extent of their understanding or misunderstanding or lack of understanding of the United States patent system. As a matter of necessity, their answers reflected and were the results of a comparison between their own system and the system prevailing or what they understand to be prevailing in the United States.

This fact, of course, was important because the soundness of the reasons they gave for favoring or disfavoring some of the aspects of their own law in comparison with those proposed in the United States

was at least in part dependent on that understanding.

The first-to-file system versus the first-to-invent system: overwhelmingly the responses indicated that the first-to-file system is probably the easier to administer and simpler system. The facts of inventorship are readily proven; no oral testimony is allowed. There is an assumption that the first-to-invent is also the first party to file a patent application. Typical of an answer we received is the following:

> The philosophy is that it is not the first inventor who has done any service to society, but the one who was first to indicate through his filing that he is willing to disclose his invention to the public. He is the one who should be rewarded.

Numerous answers also indicated that the first-to-file system provides more judicial security, less uncertainty in evaluating the prevailing patent situation than any other system. The reason given as the basis for the statement is that, "A United States patent may be invalidated many years after its grant through interference proceedings." This reason evidently ignores the one-year time limit imposed by 35 U. S. C. 135 (b).

The answers also reveal that in revocation proceedings of patents abroad there are no time limits; the action can be brought at any time. This typical answer indicates that in Europe some experts find that their patent rights are often not finally determined because of the possibility of such revocation proceedings.

Other answers show that in contrast to what was noted this morning, it is significant that there are no national European constitutions which provide rights to an inventor, similarly as in the United States Constitution.

Answers also show that the drawbacks of the first-to-file system are stated to be minimal or at least of very secondary importance. It is noteworthy though that as a group the French answers seem more aware and recognize more than other national representatives the possible injustice of the first-to-file system. Other answers show that in the first-to-file system, the position of the party left out of by the system—possibly the first to invent—is to be considered analogous to a minority party, and it has been noted in various responses that there are always some inequities to minorities in any system.

It is significant that certain answers on this and many other points introduce a political element into the picture. The possible prejudice by the first-to-file system against the "Inventor" is considered analogous to that adversely affecting foreign parties under the present United States system of interference.

On this point of interference, let me touch on a recent development

and bring this research project up to date too. The proposal of Commissioner Brenner in his testimony before the Subcommittee on Patents, Trademarks, and Copyrights, in January 1968, deserves a special comment. Serious objections to the first-to-invent system are stated in many answers that it is discriminating against foreign applicants.

In its testimony the Administration has proposed to retain determination of priority of invention by allowing applicants, both foreign and domestic, to establish the date of invention by proof of acts in *foreign* countries, limited to one year prior to the earliest filing date abroad. This would enable the foreign applicant to establish its earliest date of invention not earlier than one year prior to his filing date by proof of agents abroad.

Informal reaction to these proposals by the Administration has been highly favorable in response to personal questioning abroad. Foreign parties with whom this matter was discussed also appreciated the practical and evidentiary problem that such provisions might create, but appeared to be willing to take this burden as necessary to the right to show inventorship.

It is to be noted, perhaps with some mild irony, that if the Administration proposal became law here, the foreign parties filing within the United States would follow a dual system: a first-to-invent system for the United States purpose and first-to-file for European application. It seems paradoxical that those who have pointed out to us what they consider to be the inequities and burdens of the U. S. patent system might find themselves subject to these very burdens as the United States patent system might become more equitable, at least in their view, in amending these provisions of United States patent law by allowing foreign parties to show reduction to practice abroad.

In order to comply with the time schedule of this meeting may I again point out that questions were submitted on deferred examination. Questions on opposition proceedings received most revealing answers: Significant is that opposition proceedings are often considered a tool, a lever for forcing licenses. Its disadvantages are reported to be mainly the delay the opposition causes in clarifying the ultimate patent situation. In the area of desirability for international cooperation the answers were overwhelmingly "Yes," but probing further, it became evident that the parties were willing to harmonize on minor matters of formalities but reserved their opinions on more substantive matters.

As a preliminary conclusion the results of the questionnaires which will be probably published in the next journal of this Institute, seem

to suggest that European patent legislation is primarily directed to economic needs of Europe, and that harmonization follows the economic, legal and sociological needs of the country considered.

The studies suggest tentatively that the United States, in considering new legislation should first consider its own interests and needs and suit the legislation to its needs, and then consider whether, as incident thereto, it might harmonize its legislation with some other foreign legislation. This is the end of my report.

Thank you. (Applause)

MODERATOR SMITH: Thank you, Mr. Weiser.

The next speaker is Director Harris. I will not need to introduce him, but his subject at the moment is "Some Comparisons."

Director Harris.

L. JAMES HARRIS

My assignment in this session is to note some of the commonalities between the material I personally collected, on the experience of European experts under provisions of foreign laws that embody some of the recommendations of the Report of the President's Commission, and the opinions and experience of executives of U. S. medium-sized companies, and other innovators that we recently surveyed.

The foreign experts were, as Mr. Weiser explained, interviewed in depth, and in some cases by questionnaire; the U. S. executives of medium-sized companies, as Dr. Siegel informed you in his presentation this morning, were queried by questionnaire; and executives of certain large U. S. companies were interviewed in depth.

The foreign experts included government officials, private practitioners, and business executives in Switzerland, Germany, Denmark, France, and the Netherlands. Although we recognize that it is difficult to compare foreign experience because of the different national environments involved, the variety of provisions in the foreign laws, and the need for the patent law to reflect the legal, social, and political philosophies of the country, useful information did emerge for Ameri-

can industrial property policy from discussions with foreign experts.

Also, the similarity of thinking and experience of American executives with proposed changes in the law is strikingly manifest in their reaction to provisions in the foreign laws.

Both the European experts and the U. S. executives are prepared to accept a strengthening of the industrial property system internationally. The U. S. executives disclosed doubts about internationalization where it entailed a radical change in the U. S. system, such as a change from first-to-invent to first-to-file; frequently, the U. S. executives responding thought that the lack of uniformity in patent law, and claim format and function, militated against internationalization. However, American executives were interested in promoting international progress where costs could be reduced and foreign markets made more certain. In short, they were interested in a possible beneficial impact on U. S. foreign trade, but not at the risk of weakening the protection under the U. S. patent system.

Most of the respondents, here and abroad, thought that harmonization of patent laws would be helpful to international cooperation; but, in almost every case, harmonization was considered essential for certain types of provisions only. Although great store is placed on international cooperation by foreign interviewees, particularly harmonization and international arrangements, national interests are deemed paramount.

Foreign experts were of the opinion that the first-to-file procedure was preferable because it awarded the patent to the inventor who took the first steps to make it available to the public. They believe that the first-to-file system is simple, provides a clear-cut filing date, increases the reliability of patents, and reduces cost and processing time by removing the need for proof of events and dates before filing. In connection with this implied criticism of the first-to-invent system, despite the fact that 59 percent (41 of 70) U. S. medium-sized firms responding have been involved in interferences, preliminary findings in our interference study indicate that interference costs and their duration are quite a bit less than is generally assumed.

There were also other very revealing opinions expressed by the European experts: some said they supported the first-to-file procedure because they were used to it; and other Europeans admitted that there might be disadvantages. For example, respondents were aware of the possibility that the first inventor might be hurt, and the difficulty of taking corrective action where theft is involved. Although Europeans claim that there are very few cases in the courts involving theft of an invention, 81 percent (57 of 70) of the U. S. executives of medium-

sized companies would tighten security at their plants if the first-to-file procedure were introduced in this country.

One German industrialist responded that the system discriminates against the small inventor but "these are, after all, concerned with only small things." A Danish government official responded in similar terms, "The small man and the small company may not know all their rights, but most inventions, after all, come from large companies." American executives, on the other hand, were clearly interested in the welfare of the individual inventor. For example, a foundry president, after comprehensive response to our questionnaire, volunteered his view: "Let's not wipe out the individual inventor."

Another disadvantage of the first-to-file procedure referred to by foreign experts is that, in the words of a German industrialist, "applications have to be rushed." U. S. executives were also concerned by the probability of hurriedly prepared applications, in that the urge to file quickly would increase the number of applications and concomitantly lower their quality: 68 percent (34 out of 50) of responding executives of American medium-sized companies would increase the number of their applications; and 66 percent (42 out of 64) would file on ideas, even before trying them out in the laboratory.

With respect to the question of a grace period, foreign experts appear not to be as concerned with market testing before filing applications as are American executives. None of the Europeans queried advocated the introduction of a grace period, particularly if other countries did not do likewise. Foreign experts were quick to refer to the possibility of loss of rights abroad; Americans, aware of this, reported that they filed before publication, where international protection was important to them.

It is interesting to note a contrary foreign opinion: a French patent agent, whose clientele was mostly small companies, admitted that perhaps the individual inventor might find a grace period useful; but even he thought public testing not too necessary, because "French patent application fees are relatively low." A Dutch patent agent put it a little differently—he was of the opinion that "testing could always be accomplished during the convention year after filing." On the other hand, American manufacturers felt that abolition of the grace period would preclude them from discussing inventions with customers, at conventions, and on other occasions.

On the subject of oppositions and cancellations, the foreign experts interviewed reported that oppositions were filed quite frequently in Germany. A German industry representative confided that he "challenged about one-fifth of the number of patents" he filed; that is, for

every 100 patents he filed, he challenged 20 applications of others. Cancellation proceedings were reported as "relatively few."

In a combined sample of inventors and executives of American companies we surveyed very recently, a sizable number of respondents disfavored submitting prior art (for opposition or cancellation purposes) either one year before or one year after issue. However, there appeared to be somewhat less objection to the post-issue submission of prior art. European experts, on the other hand, prefer opposition to cancellation; they pointed out that, although opposition and cancellation proceedings may go on for years, opposition generally takes less time and is less expensive.

Assignee filing is quite common abroad. However, less than half of the executives of U. S. medium-sized companies reported that they would make use of this privilege, if introduced in the American patent law.

In none of the European countries I visited were preliminary applications part of the system; but a number of respondents had utilized the very similar British provisional application. The experience of those who had used the British provisional application was, on the whole, not unfavorable. Among U. S. executives, 85 percent (58 out of 68) of those responding stated that they would file preliminary applications, if introduced in the U. S. patent law; the sentiment of the Americans, however, was that they would probably file a large number of preliminary applications quickly, and on speculation.

Foreign experts were generally of the opinion that the *scientific community* studies patents or applications, as a type of disclosure of scientific information—and that they would do so to a greater extent as a result of earlier publication. There is also agreement, that foreign *industry* R&D personnel read patent disclosures, particularly in the chemical and pharmaceutical fields; and interviewees ventured that earlier publication would lead to more widespread reading of patents by these people.

In the United States, 56 percent (10 out of 18) of the universities responding, and 80 percent (8 out of 10) of the nonprofit foundations report that staff members study patents before embarking on a research project. Seventy-eight percent (53 out of 68) of the representatives of U. S. industry state that patents are studied before starting an R&D project. The replies from American companies, as well as from American academic institutions, indicate that they would generally make an effort to peruse applications published 18 to 24 months after filing.

In Europe, although no firm statistics were available, it appears that

cases involving damages for infringement before patents issue are not common. A majority of responding U .S. executives, however, reported that they would take advantage of the interim liability proposed for the U. S. patent law.

To summarize briefly:

It seems that both European experts and U. S. executives are

(1) Prepared to accept a strengthening of the industrial property systems internationally, but national interests are given first priority; and

(2) Both the American and European scientific communities as well as industry personnel make good use of such disclosures.

European experts and U. S. executives seem to differ in their views with respect to

(1) The advantages of the first-to-file procedure, although foreign experts do recognize certain disadvantages with which Americans are also concerned, such as hurriedly prepared applications;

(2) Foreign experts are not as interested in market testing before filing applications as are American executives;

(3) Foreign experts prefer opposition, while Americans are less opposed to cancellation;

(4) Americans are less inclined to file assignee applications;

(5) Americans are less sanguine about preliminary applications than are the Europeans; and

(6) More U. S. executives are willing to take advantage of an interim liability before issue provision.

The foregoing is not intended as a complete catalog of the responses of foreign experts and U. S. executives. It is offered, rather, as an indication of some of the opportunities to constructively harmonize our laws with those of other nations, if we are aware of and can benefit from the experience and informed opinion both here and abroad. There is no question that if industrial property is so strengthened internationally, it will have a beneficial impact on the free enterprise system and on international trade.

MODERATOR SMITH: Thank you, Director Harris.

Our next speaker will be Gene L. Finn, who is currently economist in the Office of Policy Research of the Securities and Exchange Commission in Washington. Prior to joining the SEC he was a member of the research staff of the Federal Reserve System Board of Governors and the Economic Research Service of the Department of Agriculture. Dr. Finn joined The PTC Research Staff this spring. He

will speak to us on the subject of foreign inventors.
Dr. Finn.

GENE L. FINN

Generally, the remarks with respect to the findings of the survey of foreign inventors parallel those of the American inventor, but I think they have a somewhat different orientation in that the foreign inventors in most instances are already operating under first-to-file systems. The survey focused on the ways in which the behavior of those inventors with respect to their own patent system differed from their behavior with respect to the U. S. patent system.

In all, 85 inventors with 74 inventions responded to the survey. The respondents were widely distributed reflecting many countries including: Canada, England, Germany, Japan, France and other miscellaneous countries.

Although the survey questionnaire to foreign inventors covered several aspects of their relationship to patents and their own as well as the U. S. patent system, the questions pertaining to the first-to-file issue, the grace period and the publication of pending applications are of primary interest at the present time and I will concentrate on the results in those three areas.

The answers to questions concerning the filing of applications reflect a sense of urgency and brought out quite vividly the disadvantage of an unmodified first-to-file system. The time interval elapsing between conception of the invention and the date of filing of a patent application was substantially longer for U. S. patents than it was for filings in the country of the foreign inventor.

Three-fourths of those responding to this question took longer to file in the United States than they did in their own country. Approximately one-fourth filed within six months of the conception date in their own country but did not apply for a U. S. patent until more than 12 months from the date of conception. One-sixth of the U. S. filings were made more than two years after the conception date of the invention. Most of those applications filed more than two years after the conception date involved chemical or mineral process patents.

Particularly interesting were the responses to a question asking the

inventors whether a period allowing for testing or evaluation was desirable prior to filing. There was about an even split in the yes/no response with about half of the respondents giving the reason for their answer. Those who felt a testing period was desirable cited the need for development and appraisal of the invention and the saving of unnecessary expenses. In most instances, those responding did not say that a testing period was undesirable for technical reasons, but cited the need to file first and avoidance of prior public knowledge as the reasons for their answer.

Synthesizing these answers related to filing time, we would have to conclude that most of this group of inventors felt a testing period was desirable even though it was not currently obtainable. Furthermore, the fact that most take up to two years to file in the United States and some take just as long to file in their own country suggests that a desirable grace period should not be less than two years and possibly should extend to three years. The fact that most take longer in the United States may be due to some normal need for more time such as to prepare a foreign as opposed to a domestic patent.

With respect to publication of pending applications most respondents felt the time period for pendency of an application before publishing should be the same in the United States as in their own country. There was a very heavy clustering of responses in the 12-14 month range with only six out of 50 respondents to this query falling outside of this range. (Applause)

MODERATOR SMITH: We will now hear from Mr. Green. The subject this time is entitled "Public Sector." Mr. Green has agreed to field one or two of the questions that have come up to the table. This way we will save a little time.

Public Sector

JOHN C. GREEN

SUMMARY

This report describes the reactions of nine government agencies, 42 universities and 19 non-profit research foundations that hold patents through the discoveries of their R&D laboratories. This research uncovered a number of practical and policy problems that would

result following adoption of changes proposed by the Presidential Commission. Administratively there would be reporting delays, and shortages of manpower required for additional patenting. From a policy viewpoint, disclosure would be retarded and reliance on the patent system lessened.

Ours is a society in which people gather information nationally by questionnaire for subsequent analysis. I don't want you to feel we weigh these numbers too heavily. It is the judgment of the investigators supported by case studies and the like which adds weight to investigations. The document I am reporting on now is based on case studies.

As I observed earlier the Advisory Council Chairman, Earl Stevenson, suggested that there is more than an industrial interest in the project. Specifically the government itself and universities have a large stake in the patent system. We undertook to get a reaction as to how these organizations might have to change their practice, what problems might arise for them, and I will report on those in a combined paper called, "Public Interest Agencies."

Let us look at the government first. We felt it desirable to approach those agencies which sponsor most of the research and development, and those agencies which have a varied responsibility, both a defense and civilian responsibility. Therefore we went to the military services, the Atomic Energy Commission; the Department of Agriculture; the Department of Health, Education and Welfare; the National Aeronautics and Space Administration; the Tennessee Valley Authority; and the National Bureau of Standards. Eight of the nine departments and agencies were interested in our project and cooperative. The ninth, the Department of Health, Education and Welfare, told us they were unable to compile the information we had requested.

Each of the other agencies undertook to review a series of inventions developed in their laboratories or under their auspices, and to trace the successive steps including conception, reduction to practice, the decision to patent, the preparation and filing of the application, publication, and the grant of the patent. They then agreed to look at these

same inventions and estimate what procedures, if any, would differ under the principal proposals advanced by the Presidential Commission.

I think it is fair to say that the cluster of inventions that we think of as first-to-file, abolition of grace period, and substitution of preliminary applications, would give the government agencies the most problems. I would like to interject here, we did not expect the government agencies to say that they were against the Presidential Commission Report, which the White House had accepted, which the Executive had indorsed and which had been translated into legislation.

What we did hope for and I think we got is a recognition of the practical problems they would face if the propositions became law. In particular the personnel in government agencies, who have to file and prosecute cases, saw the preliminary application and the need for earlier reporting by the government scientist and engineer as placing much heavier work loads on them. And they were not optimistic that they would get additional staff and fiscal resources. Therefore, they estimated increasing backlogs and the discarding of valuable inventions by not being in a position to patent them at all.

Even more important than administrative difficulties envisioned are changes in policy which might follow. For example, the NASA representatives offered a comment on cancellation of grace period, and substitution of preliminary applications, which was echoed by the AEC:

> If grace period is cancelled, NASA would have to speed up the filing of patent applications to avoid prior publication bar by NASA or others. If patent protection is deemed to be overriding factor, policy would have to be adopted to withhold all technical publications until patent decision is made: perhaps publication could be withheld for specific period to allow reasonable period for filing application. This would encourage trade secrecy. Withholding of publication is currently against NASA policy.

In analyzing one of its case histories the Agriculture Department commented as follows:

> Changes would have to be made in our relations with industry. This might involve, for example, insertion of special provisions in cooperative agreements allowing us to withhold any information we thought might have patent significance. Also, if the investigators were particularly cautious or patent-minded, it might lead to a situation where they would communicate nothing of significance to the industry group, with the end result that the cooperative effort would become a nullity.

The government agency which found no difficulties in the proposals was the Tennessee Valley Authority. Personnel interviewed there favored most, if not all, of the recommendations and found none

which would adversely affect their activities.

In reviewing the several governmental case studies it appears that the anticipated negative effects on disclosure of innovations made with public funds would be the most serious defect. The combination of inadequate numbers of personnel to prepare the applications, the difficulty of getting the government scientists and engineers to report their ideas at an early date, and the feeling of many research personnel that they could not talk freely about their discoveries prior to patenting, would slow down communication between government and industry to the disadvantage of both.

Now let us look at academic institutions. A sample of 42 universities and 19 non-profit research institutions was assembled, and a special questionnaire was prepared and mailed to them. This was designed to develop information with respect to the understanding of, and feeling about, patents in the academic environment. Such questions were asked as:

(1) Are patents judged to be as valuable in the advancement of personnel as publications in professional journals?

(2) Do patents contribute to the university in its role as a disseminator of knowledge?

(3) Are patents studied regularly as a part of the scientific and engineering literature?

(4) Are there instances where significant developments were not patented by choice? In other words, are academic personnel aware of patents, do they value patents highly, and what are their policies with respect to patents?

Most educational institutions announce their discoveries in the scientific press or in public conferences before related patent applications have been filed. In our study we found only three universities and one foundation that do not undertake prior publication in one form or another before consideration of patentability and the desirability of obtaining patent protection.

If the Congress went to the "first-to-file" family of propositions, they agree they would have to re-study their policies and perhaps institute some publication-limiting procedure. They also felt this change would not be welcomed by their research workers who look on publication as their normal means of achieving prestige and recognition.

I will quote briefly from two illustrative responses:

> Educational institutions publish more than they patent and such a system would place an inordinate burden on them to review all materials prior to the publication date. This situation does not prevail in the industrial community.

* * * *

> If prior publication were to preclude patenting, the patent programs of most, if not all, educational institutions would likely be terminated for lack of funds to file applications on each and every possible patentable concept.

I observed earlier that the Department of Agriculture and like agencies, the Bureau of Standards, for example, welcome scientists, industry and the public in their laboratories today. This is true of the universities as well. Twenty-six out of 32 universities now grant unrestricted admittance to their research laboratories except where classified defense work is concerned. However, only 13 would continue to do so if the "first-to-file" principle became the law of the land.

The reports from research foundations are more optimistic. Eight now grant unrestricted admittance, three do not; six, or only slightly less than is now the case, would continue to be open to the public if the proposed changes were put into effect.

Recommendation VII, which is concerned with early publication of a pending application, produced two groups of answers. The first was concerned with the anticipated study of such published applications at the university, the second with whether there might be conflicts between desired announcement in scientific journals and the early publication contemplated by this recommendation. Both universities and foundations advised that they would study publications prior to filing. Usually this would take place before filing a complete rather than a preliminary application.

With respect to a potential conflict between the published patent application and a journal article covering similar subject matter, only nine feared a conflict might arise, while 28 thought this would be unlikely.

Recommendations XI and XV, with respect to opposition and cancellation procedures, touch universities and research foundations at a number of points. Specifically, there is a major question whether these institutions, with their stores of specialized knowledge and their public or quasi-public purpose would consider it a duty to oppose another's patent application where they had pertinent information. Asked whether they would study patent applications in order to oppose them where appropriate, only three universities and no research foundations answered affirmatively. Seven universities and one foundation said clearly that they would not consider instituting opposition proceedings. Therefore Patent Office Examiners can expect little expert, disinterested help from academic institutions.

Those universities with a positive interest in patents see licensing to industry as an effective method of disclosing and disseminating the

knowledge they have acquired. It was surprising to note how many in the academic world appreciate industrial reluctance to risk capital on an idea while it was still vulnerable to attack. For example, one of the respondents said,

> Under the new proposal, industry will hesitate to invest risk capital until after the opposition proceedings, since the wages of success would almost inevitably be opposition.

And another observed:

> The opposition could result in a reluctance on the part of industry to fully invest in new untried ideas until a much later date than is now possible. This will almost eliminate the basic research inventions of universities from any likelihood of commercial development.

In Recommendation XVII institutions were asked if they would take advantage of the interim royalty provision proposed. Twenty of the 33 universities replied to this question, 18 felt that they would take advantage of the provisions. Foundations were more evenly divided with five respondents in favor, and four against.

There were some comments with respect to the requirement to grant licenses if this avenue were followed. One university observed, "We would oppose having to grant a license to a party not of our choice," and followed this with an expression, "It would restrict our ability to grant exclusive licenses to a best-qualified party." This sentiment was echoed by the president of a research foundation. Nevertheless, most of the academic institutions would favor this recommendation, while leaving it to their patent counsel or patent servicing organization to advise them when to take advantage of it.

Now, the last category of recommendations is harmonization of European systems.

Recommendations XXXIII, XXXIV, and XXXV are directed broadly toward the goal of a single, universally respected patent. In general they favored the idea, although it was pointed out by some that foreign filing is a minor and infrequent activity for an educational institution. One reason for this, as earlier pointed out, is the academic desire to publish findings in a recognized journal, relying on the U. S. grace period to permit filing for protection later. There are three additional reasons mentioned by the few who have undertaken to file abroad. These are:

(1) Difficulties caused by differences between countries, for example, the prosecution procedures, standards of patentability, and working requirements;

(2) The problem of deciding in which countries to seek protection; and

(3) The related problem of financing the procurement and maintenance of foreign patents.

The Commission's intent was to make the patent system more responsive to the public interest. Therefore these responses from "public sector" agencies with operating experience in patents deserve serious attention. (Applause)

Panel Discussion and Question Period

MODERATOR SMITH: Thank you, Mr. Green.

We now have reached the point on the program where we are ready to consider your questions. I don't know what your wish is but it seems advisable to proceed with the questions and answers that have accumulated and if necessary to ask our panelists to come in after the lunch period.

We have some very interesting questions and I am sure all of you will want to hear them answered. I will start off with a question directed to me. The question is: "Fully 80 percent of our patents are defensive patents, except for the defensive aspect applications would never have been filed. This necessity for defensive patent applications is defeating the basic purpose of our patent system. What do you prescribe?"

First, I think I would prescribe an investigation as to the accuracy of the statistical data upon which the question is based. I feel that the 80 percent figure is high. There is no question but that many patents are filed for so-called "defensive purposes." I do not know whether the Institute has any studies along these lines, but speaking from a rather broad experience in the patent field, I found that the definition of a defensive patent very generally was a patent which did not quite "make it."

The general intent at the time of filing often was, we are going to make a million dollars out of it. It became a "defensive" application only when it was found that the million dollars was a bit optimistic.

Now, whether this is a valid observation or not I cannot say. I do think, however, that a gross statistic such as 80 percent of the applications being for defensive patents requires investigation on a factual basis.

My point is this: The argument about "defensive patenting" is defeating the basic purpose of the patent system. Here we need to consider and define this basic purpose.

I have always believed it was in the public good to secure the prompt publication of inventions. If so, it seems to me then that one basic purpose of the patent system is to get more and more patents filed, call them "defensive" or what you will, every such patent will add some bit of information to our store of knowledge and it may just relate to a particular point that some future researcher, some years in the future may find valuable even if the patent in its time was no more than a so-called "defensive patent."

So, even though 80 percent of the patents are filed, as defensive patents, a fact which you see I question, I still think the basic purpose of the patent system is served, for each such patent necessarily increases the amount of information available to the public through our patent system.

Dr. Bangs has a question.

DR. BANGS: I have a question on the grace period, which asks: Did inventors understand public use, sale, or publication as distinguished from secret evaluation of invention which is the usual case and against which no time bar usually runs?

I can only answer that by saying that inventors understood by the grace period, the one we have in existing law, and generally speaking they were extremely reluctant to see that given up or modified because they find it very useful for testing and evaluation of their inventions.

MODERATOR SMITH: Mr. Green has a question.

MR. GREEN: The question is: Has the research team given any consideration to the feasibility or the desirability of basing the prosecution of government-owned inventions on a system which is that of the Commission's proposal? Is this an area in which many of the controversial ideas can be explored through operational experience?

Maybe we were wrong but we decided not to try to do this and I will try to tell you why. Perhaps one reason is we were not sure how to do it, but mainly we felt that the government takes out patents mainly for defensive purposes; therefore the government patent information cannot readily be extrapolated to normal commercial practice. Since we felt that really the major impact of the patent system is to encourage innovation in industry, we thought we should not siphon off some of our resources to such an investigation.

We may have made a questionable decision but that is the one we took.

MODERATOR SMITH: Dr. Sanders has a question.

DR. SANDERS: The question I have is: You have suggested that the first-to-file system increases filing of the lowest quality. Have you any quantitative data on either of those features?

On the feature of quality, since, as I have indicated, the tables seem to bear out, well over about half of the patented inventions that are reported as having been put to commercial use are first used before patent application. Then you can see that at least half that many patents were not filed because they were found lacking. Therefore, just by inference you can estimate that portion.

I have no firm figure other than that inferential figure, but as I see it, if the research is carried to its culmination we would have better gain in inferential figures. My present guess, perhaps not even informed guess, is that it would increase by a factor of two or even three.

MODERATOR SMITH: The next question has been directed to Dr. Siegel.

DR. SIEGEL: I have been asked if there is available a breakdown of the responses for chemical versus non-chemical companies to our questionnaires. Yes, sir, we do have a breakdown available.

Further question: If there is a breakdown available, is there any notable difference in the responses between chemical and non-chemical respondents?

In brief, the answer seems to be that the chemical companies felt even more strongly than respondents in general about most of the questions, or at least felt the same way. I think that, if we resorted to formal statistical tests, this comment would hold up; but, of course, the chemical sample is small, so I hate to cite actual figures to you. A later paper will show some of the results.

Despite problems of statistical significance, I think I can safely say now that chemical companies generally feel even more strongly than other companies do about many of the crucial issues treated in our questionnaire.

Thank you.

MODERATOR SMITH: We will adjourn for lunch.

(Whereupon, at 12:05 p.m. the Conference recessed, to reconvene at 12:45 p.m. the same day.)

LUNCHEON SESSION

The Pace of Change*

JOHN F. KINCAID

SUMMARY

We live in an age of accelerating change. One major element of this is world population. It is estimated that it took 8 million years to reach a world population of one billion people. We are now producing our fourth billion and it will require only 13 years; the fifth billion, as estimated, will require only seven years. In economic terms, since 1870, the Gross National Product (GNP) of the United States has grown in constant dollars from $24 billion to $700 billion in 1968. But, greater than these elements of economic and social change has been the unprecedented impact of science and technology. It is estimated that our published technological literature has doubled since 1950. This is to be compared with the fact that it took almost

* The luncheon address was given by Dr. Kincaid, Assistant Secretary of Commerce for Science and Technology, Department of Commerce.

1,800 years for man's knowledge at the time of Christ to double. After eons of doubling and redoubling the factors of change are beginning to exert a profound qualitative as well as quantitative effect on our society. This has produced many desirable changes and has also produced many undesirable by-products; i.e., pollution, crowding, and the fact that a substantial proportion of our labor forces are unemployable in our complex society.

When the final historical evaluation is made, this Twentieth Century —and perhaps the half century which preceded it—may well be known as the Age of Accelerating Change.

Scientific, technological, economic, social—*change* is the hallmark of our era, the signature of our industrial society, and the challenge to our governmental, industrial and educational leadership. Our ability to stimulate change, and to direct it into constructive channels will be the measure of our nation in the remaining decades of this century.

In economic terms, since 1870 our GNP has grown (in 1958 dollars) from $24 billion to an estimated $696 billion in 1968—a per capita rise from $573 to $3,361. Gross private investment in the domestic economy has risen from $5.7 billion in 1870 to $96.9 billion in 1967, also in constant 1958 dollars.

Our society has been shaken by the transition from an agricultural to an industrial economy, accompanied by a mass exodus from the farm to the cities; a revolution in transportation, communications, and marketing; an upward surge of expectations among the disadvantaged; and a revolt against some of our most basic mores.

The rise in the sheer numbers of our population has been a major factor of change. For a measure, let us look at the growth span of our race. It has been estimated that man required an estimated eight million years to reach a world population concentration of ten million; 10,000 years to reach 300 million; 1,500 years to reach 500 million; 350 years to reach one billion in 1850; 75 years to reach two billion in 1925; and 37 years to reach three billion in 1962. We can expect to reach four billion by 1975, and five billion around 1982. Since 1870, our population in the United States, alone, has grown from about 38.6 million to more than 200 million.

But greater than these elements of economic and social change, in my estimation—and to a large extent a motive force behind them—has been the unprecedented impact of science and technology. So rapid has become the pace, and so great the magnitude of change in these

fields that it is difficult to comprehend, let alone evaluate it.

For perspective, let us place this era again in context with the past. For a crude yardstick to measure the pace of technological change, imagine a period of 50,000 years, or 800 modern life spans. If we think of each life span as a person—that is, of 800 individuals living in sequence—650 would have spent their lives in caves or some other primitive type of shelter, as their ancestors had done for millions of years before them; only the last 70 would have had any truly effective means of communicating with each other; only the last six ever saw a printed word or had any practical means of measuring heat and cold; only the last four could measure time with any precision; only the last two ever saw an electric motor; and many of the common items which make up our world today were developed within the lifespan of the 800th person.

For a measure of the *magnitude* of technological change, let me quote Carroll W. Pursell, Jr., and Melvin Kransberg, writing in *Technology in Western Civilization:* "The 20th Century has witnessed technological growth of such magnitude that it can be said to have equalled or surpassed, both quantitatively and qualitatively, *all previous technological developments throughout history.*"

As for the growth of knowledge which made this pace of change possible, the National Education Association has estimated that it took until 1750 for man's knowledge at the time of Christ to double. The second doubling was completed some 150 years later, in 1900; the third, 50 years later in 1950; and the fourth doubling has taken place since 1950.

In the words of Dr. Harold S. Mickley, Director of the Center for Advanced Engineering Study at Massachusetts Institute of Technology: "In the last 15 years we have stored as much information in the technical literature as in previous recorded history."

While change has been accelerating throughout history, its impact has been increasing even faster. The doubling of man's *knowledge* in the 1,750 years following the birth of Christ produced only minor changes in the way of life of the average citizen in any one generation—or any two or three generations, for that matter. But the second doubling ending in 1900 brought about broad changes within the span of single generations; and the third doubling ending in 1950 produced changes so profound we have not yet been able to evaluate their effects on individual psychology and patterns of social behavior. As for the doubling of knowledge which has taken place since 1950, a generation will pass before we can evaluate its impact. If the stresses visible among us today are any measure, its impact has been very great

indeed.

At the turn of the century there were probably no more than 12,000 engineers and scientists working to understand and change the world. With few exceptions, their impact on everyday life was still comparatively small. Today nearly half a million scientists, over a million engineers, and another million technicians are at work, and their impact is very great. Change is their business, and we as a nation are backing them to a degree unthought of three decades ago. The estimated spending for R&D for 1968 will be $20.7 billion in 1958 dollars, in contrast to $2.1 billion in 1940, and mere millions at the turn of the century. As a percentage of GNP spending for R&D has risen from 0.9 percent in 1940 to 3.0 percent in 1968.

The conclusion seems to me to be inescapable: After eons of doubling and re-doubling, the factors of change are beginning to exert a profound *qualitative* as well as quantitative effect on our society. It behooves us to examine the impact of these changes and devote the necessary effort to planning ahead so that future patterns and rates of change will be beneficial and not—as they might otherwise be—destructive.

This is particularly urgent today, for we are nearing the point at which we must step in and interfere with the rate of change in some of the most basic factors which affect our society. To illustrate, let us suppose that we do nothing and permit current rates of population growth to continue unchecked throughout the world. It has been estimated that by somewhere near the middle of the year 2617 we would have a population density of roughly one person per square foot of land. Obviously, this is ridiculous; but so is the thought that we can let natural, built-in regulators take care of the problem automatically. Too often in the past the "regulators" have been war, pestilence and famine. We should seek more humane population controls in this enlightened era.

We are approaching a similar point of decision on the level of spending for research and development. If we project the spending curve of the last few decades into the future we find that the nation's laboratories would be absorbing the lion's share of the anticipated GNP before the year 2000. This, too, is patently ridiculous. Under the pressure of economic needs in other sectors of the economy, spending for R&D is beginning to flatten out, but it is of crucial importance that we maintain a healthy spending level in line wih the growth of the economy. We can define "healthy spending level," however, only if we have sufficient understanding of the relationship of science to technology, and the impact of technological change on society.

I could enumerate many other points of decision, but I believe the

implications are clear: *Our greatest national need today is a deeper understanding of the prime movers behind change, their interrelationship, and their effect upon society.* Let me now discuss two such prime movers which are closely related: science and technology.

Pure science is knowledge oriented. It uses the scientific method of investigation for the primary and sometimes the sole purpose of increasing man's understanding of nature.

Applied science seeks greater knowledge of nature, but it is mission oriented. It has a specific goal: To change, improve or harness nature. Applied research is the bridge between pure science and engineering.

Engineering seeks to design, build and demonstrate devices, systems materials and processes which are useful to society. Engineering, therefore, is the bridge between scientific knowledge and innovation.

For a simplified image we may say that pure science is discovery, applied science is exploration, and engineering is development.

Before the middle of the nineteenth century, the relationship between science and technology was quite loose, and quite variable. Up to that time, according to Pursell and Kransberg,

> . . . the wedding of science to technology had been a philosopher's ideal . . . but by the beginning of the twentieth, the marriage had been consummated and its offspring were increasingly numerous. More important, the union had been institutionalized in the industrial research laboratory. This new institution had arisen first in Germany in the last half of the nineteenth century, and in the United States it was foreshadowed by Thomas Edison's laboratory at Menlo Park. Soon after the turn of the century, the General Electric laboratory was established and it became, almost immediately, the archetype of the research laboratory. Here, and in increasing numbers of other establishments, large numbers of scientists, mathematicians, engineers, and technicians cooperated to provide an entire industry with everything from fundamental research into the laws of nature, to quality control of current products.

Peter F. Drucker, writing in *Technology and Western Civilization,* illuminates the changing nature of technology and its relationship to science:

> Throughout the nineteenth century, technological activity, despite tremendous success, was still in its structure almost entirely what it had been through the ages: a craft. It was practiced by individuals here, there, yonder, usually working alone and without much formal education. By the middle of the twentieth century technological activity has become largely specialized, and it is to a very substantial extent being carried out in a special institution—the research laboratory, particularly the industrial research laboratory—devoted exclusively to technological innovation. . . .
>
> Hand in hand with changes in structure of technological work go changes in the basic approach to and methods of work. Technology has become science-based. Its method is now "systematic research."

As for the relationship of the scientist to the engineer, he says:

> Historically, the relationship between science and technology has been a complex one . . . But it is certain that the scientist until the end of the nineteenth century, with rare exceptions, concerned himself little with the application of his new scientific knowledge, and even less with the technological work needed to make knowledge applicable. Similarly, the technologist, until recently, seldom had direct or frequent contact with the scientist and did not consider his findings of primary importance to technological work.

The change, according to Drucker, began about 1850 and became a powerful trend shortly after the turn of the century. World War I was the catalyst. All of the belligerent nations mobilized scientists for the war effort, and the result was a revelation to industry.

For the first time, industrial leaders had a clear demonstration of the power of science to spark technological ideas and indicate the path toward solutions of technological problems. It was then, too, that scientists discovered the challenge of technological problems, and the promise of new technological devices as research tools. There is still a considerable time loss in most cases, between a scientific discovery and a technological innovation, but it is growing shorter. Drucker says:

> Today technological work is, for the most part, consciously based on scientific effort. . . . A great many industrial research laboratories do work in "pure" research. . . And it is a rare laboratory that starts a new technological project without a study of scientific knowledge. . . . At the same time, the results of scientific inquiry into the properties of nature—whether in physics, chemistry, biology, geology, or another science—are immediately analyzed by thousands of "applied scientists" and technologists for their possible applications to technology.

To illustrate the influence of scientific discovery on innovation, let us enumerate some of the scientific breakthroughs in the period 1859-1905—breakthroughs which have had time to exert a sustained pressure for innovation: Maxwell, electricity and magnetism; Mendeleev, the periodic law; Kekule, basic work in organic chemistry; Pasteur, germ theory of disease; Kirchoff, systematic spectroscopy; Thomson, discovery of the electron; Curie, discovery of radium; Planck, development of the quantum theory of radiation; and Einstein, statement of the special theory of relativity.

The pioneering achievements of these scientists provided the inventor, and later the applied scientist and engineer with a deeper insight into the essential nature of the problems he was attempting to solve. They helped give technology a running start as it entered the twentieth century, and subsequent breakthroughs have accelerated the pace.

The contributions of modern science to technology, however, are not limited to breakthroughs. Much progress is the result of *painstak-*

ing, deliberate, methodical, organized research involving teams of men whose orientations include many disciplines in both science and technology.

This approach may not be as romantic as that of the inventor in his attic, or the white-haired scientist seen at the instant of discovery; but during the past few decades it has produced a tremendous volume of knowledge about matter and energy, about structures and functions and relationships, providing the innovator with precise knowledge having direct bearing on the problems confronting him. This approach has also provided the scientist and engineer with tools for research, for analysis and synthesis, of a versatility, speed and precision undreamed of even a generation ago.

In this context, at the other extreme from the fundamental breakthrough at the frontier of some research domain, we must place a proper value on the scientific finding which leads to a gain in the precision of measurement, an improvement in a machine or process, an increase in the speed of data transmission of computation, or, perhaps, a refinement in systems theory. It is gains such as these which have made possible our achievements in the space program; it will be, in all likelihood, an accumulation of such gains which will enable tomorrow's engineers to build the first system deriving useful power from the fusion of the atom.

We must recognize the fact that the line of distinction between science and engineering is blurring, as are the internal lines between the disciplines. The systems approach, for example, permits the systematic application of all the intellectual skills, all the scientific and technological disciplines and tools required to treat any given problem as an entity seen in total perspective. It enables a manager or a scientist or a systems engineer to identify a complex problem, describe it accurately, determine quantitatively the major trade-offs, evaluate the real alternatives, and develop close-to-optimum solutions.

No one who works with complex systems; no one who has participated in the work of a modern research establishment would question the intimate and growing interdependence of science and technology in today's world.

Granting that we have emerged in this century into a new kind of society whose characteristics are determined, in large part, by qualitative impact of change and the new interdependence of science and technology, what must we do to achieve the maximum national gain from these developments?

Certainly the first and most important requirement lies in the field of *education.* Brain power is replacing natural resources as a resevoir

of national wealth.

To harness the enormous power of the new knowledge flowing out of research in the human, physical and engineering sciences; to increase that flow; to channel it into new technology, new industry, new products and services, new wealth, we must have an educational system which is flexible, open to innovation, geared to change. We must build a strong feedback loop from technology into the educational system to help students learn more quickly. We must motivate *more* students to spend *more* time in formal learning before they move out into careers, for tomorrow's scientist and engineer will need *much* more math, a *much* broader base in fundamental science, *much* more experience in research at the cutting edge of their particular discipline; *much* more exposure to the interdisciplinary approach to problem solving.

We must prepare them for the fact that by the mid-1970's the average working engineer will have to spend the equivalent of one day per week in some kind of formal educational program *for the duration of his career*; and that the average scientist, in effect, will have to re-earn his Ph.D., often with normal assistance, two to four times during his professional career.

Companies and governmental agencies using scientists and engineers will need assistance from the educational community in learning how to *utilize the skills* of this new breed of professionals. The interdisciplinary concept must transcend the "team" approach and take shape around the systems concept of work.

Experts in research management who learned their trade in the Thirties and Forties must learn to live with the *computer* as a logic and design tool as well as a tool for computation, and the entire management structure must be reorganized to utilize the vast potential of systems analysis and engineering.

City, state, regional and national planning must begin to make *coordinated use* of these systems tools in determining needs and means, and harnessing manpower, money, materials, energy and technology, in optimum configurations.

A much higher degree of sophistication must be achieved in establishing research goals and planning and coordinating research activity at all levels of the national effort; yet we must exercise great and continuing care to avoid interference with scientific freedom to move into new and unforeseen pathways of investigation.

Science and technology must assume a joint responsibility for the effects of their work on society. No longer can we tolerate—at any level—such hazards of unplanned and runaway change as air and

stream pollution, traffic congestion, urban congestion, or the waste of resources, both material and human.

The challenges are there, and they are exerting unbearable pressure upon us for action. We must clear the air and purify the streams; abolish poverty; untangle city traffic and reduce its housing congestion; learn to conserve our physical resources; find better ways to eradicate disease and mobilize the full human potential; gain control over the weather; conquer and develop the oceans; harness hydrogen fusion; and develop the earth's water resources.

For a measure of the potential locked up in these challenges let us look briefly at one of the less familiar of them: water. Most of the water available to man is in the wrong place or locked in with undesirable substances. About 97.2 percent is in the oceans, denied to us for most uses until we have an economical desalinization process; 2.15 percent is locked up in the ice caps and glaciers; and only the remaining 0.65 percent is accessible in the form of lakes, rivers, streams, underground bodies of water, and in the atmosphere. Of the 300 billion acre-feet of snow and rain that fall on the earth each year, only about 11 billion acre-feet, or some 3 percent are used to grow all the world's food and fiber. A minute change in overall distribution—in the right direction—would make the deserts bloom and change the whole picture of the earth's potential for food production.

We are moving into an era of almost limitless potential for accomplishment—or catastrophe. We have the knowledge, the power to remake the world to our own design. The question is, do we have the judgment to make that design a viable one, and the will to see it through. (Applause)

Panel Discussion and Question Period, Continued

MODERATOR-COMMENTATOR SMITH: Gentlemen, will the meeting come to order? Mr. Weiser has a question.

MR. WEISER: I hope the party who asked this question is in the audience. The question asked is: What has been the experience of countries providing for deferred examination?

Our questions have been directed to finding reasons why a country does have deferred examination or why it does not have deferred examination rather than its experience.

Before answering this question you ought to know that we asked the experts their opinion about the desirability of novelty examination and that of having an examination for patentability or inventive height. Unquestionably the great majority of the answers indicate that they would like to have a form of examination. It promotes, they stated, judicial certainty and gives the patent greater prestige. Countries that do not have examination rely on the Dutch and American patent (or application) for license negotiation and for financial evaluation of the worth of the invention. With that background, now this is what we found with respect to deferred examination.

We found that deferred examination appears to be a common stage reached in the patent development of countries from two extremes: those countries that do not have examination and would like to have it because they realize the advantage of examination and have therefore adopted deferred examination as a compromise On the other hand countries that have full examination for patentability, such as Holland and Germany, have adopted deferred examination, also because they would like to retain the advantages of examination and on the other hand have recognized that they cannot keep up with the magnitude of the practical and administrative problems, which examination of all applications entails.

Therefore, for a country that is capable of keeping its backlog of patent applications to an acceptable level, there seems to be no reason for adopting deferred examination.

MODERATOR SMITH: Thank you, very much.

Our first speaker-discussant this afternoon is Mr. Edwin C. Rinker.

I know Mr. Rinker has been getting good advice because one of our

former law clerks is patent attorney for his company, the Sel-Rex Corporation. In fact, it was through the good services of Stan Lieberstein that I was able to have some of the background information about Mr. Rinker.

Currently he is Vice-President and Technical Director in Charge of Research and Engineering for the Sel-Rex Corporation. His career is in the field of electro-chemistry and electroplating. He served as consultant to the Manhattan Project at Oak Ridge. For those of us who have been passing on the matter of patents on a somewhat idealistic level, Mr. Rinker holds 157 patents and there are numerous pending patent applications in his name.

He is the author and co-author of many articles in the field of electroplating, particularly with respect to the industrial use of gold. Although Mr. Rinker has made many contributions, he is known for his work in achieving the best commercial process in acid media. It is a pleasure to present Mr. Rinker.

EDWIN C. RINKER

SUMMARY

I commented on various topics from the innovator's standpoint.

The great time span between the application and the issuance of patents is too long, thereby providing others with the opportunity to "cash in" on those inventions pending patents.

Early filing is helpful in procuring economic benefit from a product by getting commercial use from it quickly. However, early filing often causes the loss of broad coverage.

Extremely broad coverage is often discouraging to small research groups who tend to stay away from crowded fields. In this manner they are often missing possibilities for new developments and improvements.

In conclusion I believe that no invention is a small one because each new invention leads to new and better discoveries.

I am with a medium-sized corporation. We serve a small segment of industry. While listening to the speakers this morning—it is very difficult to write and listen at the same time—I picked up only a few items on which I wish to comment from the innovator's or the inventor's point of view.

Dr. Harris mentioned something about closing the time gap between the application and issuance of patents. Let me relate a few experiences on this matter. We applied for a patent at the Patent Office and several years later, when the process was gaining acceptance, a paper was given on this particular process by someone other than the inventors. You can appreciate that when the patent was issued, it was rather embarrassing for us to discuss the fact that we were not the authors of the paper, but rather the innovators of the invention. This was particularly true inasmuch as the person who gave the paper was a very important customer of ours.

Another point regarding the length of time it takes for a patent to issue in the United States is shown in a conversation I had with a competitor. "Sir," I said, "you really cracked our process." He replied, "Yes, but I could not do it on the basis of chemical analysis, I read about it in a foreign patent." This foreign patent was issued some two years before we received the patent in the United States.

From my standpoint it appears that having an early issuance is of some advantage to the inventor.

Dr. Finn commented too that there was to be a movement in which foreign countries would coordinate their efforts with the United States in issuing patents a about the same time. I think this would be good practice in light of what I just menioned to you.

Another speaker, Dr. Bangs, spoke about the question of early or late filing. I don't know on which side of the fence I stand on this, but I can give you the experience of an innovator.

If you have an early filing, you are filing for more than one reason. One is economic—the urgency of taking this product or whatever it might be, introducing it into the industries you are serving, and gaining commercial use of it.

With an early filing there may be other areas akin to the area in which you are investigating. If you wish to broaden the patent and obtain further protection, it may be to your disadvantage to file early. By filing early, assuming the patent issues, that same patent could be used against you on the basis that the Patent Office would refer back to the issued patent preventing you from covering the broad field to which the original idea is entitled.

However, on the reverse side of that argument, if you file early and

supplement the early filing with subsequent continuation applications, assuming, of course, the patent does not issue forthwith, it means you can thoroughly investigate that particular area of your research. You have an opportunity to find out the requirements of the industry you serve and you can follow that particular path in order to satisfy commercial needs.

The end result would then be that you would secure sufficient patent coverage upon which you could gain economic advantage.

In this country it has been my experience that when you file early you are completely narrowed within the specific field due to the fact that it is more difficult to obtain broad coverage. Due to the patent laws in Switzerland, a patent issuing there can be of much broader scope than the one issuing on the same invention in the United States. In fact, one of our patents was involved in litigation in Switzerland and because of the broader protection afforded there, we won the case. My experience shows that foreign courts seem to be highly knowledgeable in the field of patent litigation.

Judge Smith quoted an author, "Innovation is the sole factor in human progress." I believe that 100 percent. I believe it was Abe Lincoln who stated, "The reason for having the Patent Office is that it will encourage originality, which in turn would encourage the well-being of humankind."

After having filed the application for a patent, there is a tendency for some innovators to try to cover the entire waterfront. In so doing, many of the ideas and thoughts are not necessarily practical and would have no commercial value. In fact, they may have no use whatsoever.

Now, this, to me, has a discouraging effect. This is disheartening to the innovator and particularly to the lone-wolf inventor—the attic inventor from whom most of our past inventions emanated. If in his patent search he sees that there is a broad field that has been covered by a so-called paper patent, he would be inclined to be discouraged.

Now this, of course, refers only to a lone-wolf inventor or a research group that is employed by a small or medium-sized business. They will automatically move away from a crowded field which might hold opportunities for further developments or improvements.

I have one last comment. Mr. Harris, in his second appearance at the microphone, mentioned an experience or quoted someone from Germany about the little inventor who is inventing only little things. I believe that no invention is little because every one of the great inventions made up until the last, say, 30 years was made by someone who was not in the industry to which his invention contributed so greatly. Some examples are the Wright Brothers with the airplane and

Thomas Edison with his electric light which the oil lamp and gas companies certainly did not invent. The carriage makers certainly did not invent the automobile.

Thank you for your time. (Applause)

MODERATOR SMITH: Thank you, Mr. Rinker.

Since I am supposed to be something of a moderator, I might throw in this further observation from William James. I always found it very helpful. He said, "The great inventions come out of exploring the irregular phenomena of science."

Now, I would hesitate to go to a research group or board and say, "I have an irregular phenomena of science I would like to explore. Give me $100,000." They want something a little more concrete than this. Yet the average inventor, in his little shop or little business or in his back room, is quite apt to be exploring exactly that irregular phenomena of science. He wants to know why, and he wonders why. He has the disease and he is in trouble right then so he goes at it.

Our next speaker you will find has a very interesting background. He is Nicholas Prasinos. He graduated from the Massachusettes Institute of Technology in 1948 and from Suffolk Law School in 1958. He is a member of the Massachusetts and Federal Bars and presently Business Manager of Microwave Associates, Inc. in Burlington, Massachusetts. He has held various positions in this company, one of which was chief engineer in research and development.

I give you Mr. Prasinos.

NICHOLAS PRASINOS

Honorable Judge Smith, distinguished members of the panel, Ladies and Gentlemen, after listening to these many carefully researched and erudite dissertations I come with a distinct impression that there is a consensus or a majority that requires some change. However, I do get the message that we should go slowly.

I can only give you my impressions as a business manager. What are some of the financial implications which we would like to see in these changes? I think primarily we are looking for a better quality of

patent to issue. We are looking for something that will not take as long to issue and probably not cost as much in the long run. And, thirdly, I think, looking at it from a broader point of view, we are interested in the universality of the patents, so that a patent in the United States or in Russia would be offered the same weight.

Let me get back to quality, and I might say that some of the considerations with respect to quality are as follows: once a patent is issued it should be a strong patent; we should have the right to exclude others from practicing the invention, not merely a right to initiate suit. I think before investing large sums of money in exploiting a patent we want to be sure that the patent will stand the scrutiny of the courts.

Now, I believe that this citation recommendation might tend to have a better patent issue, a stronger patent. Certainly, interested parties will be afforded the privilege of attacking the patent, and this might have the beneficial effect of narrowing the claims so that you really know where you stand with respect to a patent.

I think also, that possibly the complexity of the patent, the administrative procedures might be streamlined, and I am not so sure how that would be done, but certainly one suggestion might be to get a broader art on the computer to include the DOD references, NASA, prior patents, engineering abstracts, and go into the Patent Office with an application which will have some real strength.

Now, these are some of the main points that come to mind. I think that I might add here that what we are trying to do, as I see it, is to correct some of the abuses of the *present* system. I might add, if I believed Dr. Kincaid—and he certainly backed up his comments very effectively—that we should have a plan now as to what will happen in the long range future and possibly use the techniques that many companies are using in planning their long range objectives, such as computerized simulation techniques and possibly form a model of the entire community, the world as a whole; and then let us see what the interaction might be before we actually take the steps toward untried change. Thank you. (Applause)

MODERATOR SMITH: Thank you very much, Mr. Prasinos.

Our next speaker will be John L. Gray, who is an attorney. He is currently General Counsel for Battelle Memorial Institute. He has been with Battelle for 19 years. At the present ime he is also Vice President and General Manager of The Battelle Development Corporation, which is a wholly owned subsidiary of Battelle for the purpose

of developing inventions.

He is also Vice President and General Manager of Scientific Advances, Inc., which is a wholly owned manufacturing subsidiary of Battelle.

Mr. Gray is a member of the Patent Law Committee of the National Association of Manufacturers. He has been past chairman of The Atomic Energy Committee of The Ohio State Bar Association. He has had papers published relating to the legal aspect of atomic energy and patents.

He received his B.S. in chemical engineering in 1943 from Pratt Institute and an LL.B. from Albany Law School of Union University in 1948.

I give you Mr. John L. Gray. (Applause)

JOHN L. GRAY

SUMMARY

The author's experience indicates that, of approximately 1000 inventions evaluated annually received from individuals, universities, industrial organizations, and his own nonprofit organization, about 20 are in a condition to be licensed several years later.

The proposed changes in the patent law would have a serious effect on university inventions because of the tendency for early publication. This would be particularly true if the one-year grace period is eliminated. The adoption of a first-to-file procedure would result in additional costs in prosecution because of the need for more continuations-in-part patent applications. The author indicates the tremendous importance of patents to the establishment of new small companies or the enlargement of existing ones. He also stresses that any internationalizing of the patent system should involve the adoption of the proven successful system of the United States, rather than the unsuccessful European system.

Thank you, Judge Smith, Ladies and Gentlemen.

My comments with respect to the very fine presentations this morning have to be in the framework of Battelle. So, I will have to go through about a one-minute commercial, if you will bear with me, to put this in the proper frame of reference.

Battelle is a nonprofit organization engaged principally in contract research for industry and government. We have about 7,000 employees, and this year we will do about $130 million in contract research in four laboratories: in Columbus, Ohio; Richland, Washington; Frankfurt, Germany; and in Geneva, Switzerland. Also, four minor laboratories in the United States. Most of the people at Battelle are engaged in contract research. However, we have some other activities, basic research activities in Seattle, Columbus and Geneva, and then the two subsidiaries with which I am concerned.

I have some numbers I would like to present. I will have to do it from memory so they won't be quite accurate. Last year the Battelle Development Corporation examined about 1,050 inventions. These came to us from four different sources. Approximately 250 came to us from our four laboratories. Approximately 75 or so came to us from 25 universities with whom we have agreements. A large number, 600 or 700 came to us from individuals outside of Battelle and about 75 or so came to us from industry. That should add up to close to the first number I gave you.

Now, we evaluated these inventions from the standpoint of technical feasibility, market and patentability. We selected for initial funding about 80 of these 1,100 inventions. The highest percentage of acceptance was for those inventions that came to us from the universities. The next highest percentage was from our own laboratories, next highest from industry, and much, much lower those from the outside. In fact, most of the inventions that we get from the outside are very poor quality, but there is a fellow by the name of Chet Carlson, who came to us from the outside, so we have to look very carefully at all of them.

These inventions come to us either as disclosures, as patent applications, or as issued patents, usually as disclosures or as patent applications. Now of those 80 initially selected for funding, about half of them will wash out in the first three months, usually because of failure to demonstrate technical feasibility. So this leaves 40 out of the original number. The 40 then will be the subject of continuing research and development, attempts to improve the patent position, obtaining greater and better market information, and this can go on from six months to a couple of years. And our investment might be

another $25,000 to $300,000 or $400,000 before we are ready to license. Incidentally, in evaluating those 1,100 inventions last year it cost us about $275,000.

When we are in position to license, we don't take this invention to a licensee and say, "We have a nice invention, wouldn't you like to take a license?" We go in with this kind of a story. We say, "We have a new process or new product. This is what we think will be the market for it. This is the way we think you can penetrate the market. This is why we think you should be a licensee. This is the kind of additional investment that it is going to take to reach the marketplace. This is the current technical state of the development. This is the return on investment that you can expect, and this is the stage of patent protection." At the time we license we usually are licensing a patent application, sometimes with claims allowed, quite often not.

To go back then, what would be the effects of some of these proposed changes in the patent law on our sources of invention, our activities? First, let me talk about the matter of the one-year grace period, and the elimination of that. This in my opinion would be disastrous with respect to inventions from universities. Most of the inventions that come to us from universities have already been published. Too often we get a reprint of a technical publication that has a publication date 11 months prior to our receipt of the invention. We have to make a decision in a hurry. Occasionally we will get an invention early enough.

I have a gentleman who has a broad technical background, who is retired from Battelle, who spends half time just making pastorial visits to universities trying to educate the universities to this problem of early publication and how it can tend to cut down on the eventual patent rights.

So, it would be, in my opinion, a real problem with respect to universities. As far as inventions from Battelle, I don't think it would be any greater problem because we can control publications there. Most of the things that come to us from the outside, from individuals from the outside, have not been published. So here again, it is not much of a problem. Those things that come to us from industry, again, usually are pretty well protected, there has not been premature publication, and I do not think it would be too much of a problem there.

I would like to make a comment about the matter of first-to-file. At the present time those inventions that BDC acquires from our European sources usually have been filed in the country in question, either West Germany or Switzerland. I would say that the corresponding U. S.

cases have to have more work done on them. There are more continuations-in-part filed, than if a case had been originally filed in the United States. But it has not created any great problem with us. I do not think it would be too much of a problem for our kind of activity in the United States.

I do want to comment on two things that Dr. Sanders said. I find it very difficult to believe some of the numbers that he mentioned with respect to the percentage use before filing. I am not questioning his veracity, but I do wonder about the definition of "use," whether this is actual sale or whether this is merely a reduction to practice. The reason I say that, is in our experience, filing occurs a long while before the product is sold in the open market. The other point that he made that I would like to comment on relates to the attempt to determine the quality of U. S. inventions based on the corresponding foreign patent that is maintained, as in Germany when the maintenance fees have gotten to be rather high. There is a danger in drawing conclusions from these data because in some cases the same invention will have better acceptance in the market in one country than in another.

I would like to go on record that as far as my own feeling is concerned, I think our present patent system is great. I think it has been very important in enabling this technological gap to arise, which I think is good for our country. And, I am not against internationalizing the patent system, but I think we ought to, maybe, make the changes so that they would conform to the successful leader, rather than some of the less successful followers.

One other word: for the past five years we have been trying to start some technically based companies as part of our total purpose. We have a number of these in Columbus, out in the Pacific Northwest, Denver, Los Angeles and two in Europe. It is imperative to have these companies built around a proprietary position. Difficulties in getting a small company launched are tremendous. I am sure some of you have more experience then I have, but I have had a lot of experience in the past four or five years and there are fantastic problems when you are dealing with new technology and trying to enter the marketplace. Unless you have a proprietary position, it can be just horrendous.

I think, too, the only company that I have had any experience with, that is a large company, that has been involved in a patent situation, is Xerox. I think Joe Wilson would be the first to agree that a very important part of taking $10 million a year sales to almost $1 billion a year was the very important patent structure developed from the initial two basic patents of Chet Carlson into the 150 patents sold to Xerox when we completed the 1955 sales agreement. I think it is a

good example of the importance of our patent system to the development of a large company.

Thank you very much for your attention. (Applause)

MODERATOR SMITH: I would remind you again that there will be a time for questions and answers, so if you have questions you may send them up as you did prior to lunch.

Our next speaker is George H. Jenkins, who is from the Gates Rubber Company. He is a graduate engineer. I think I shall read you some of the positions he has occupied, because it will tell you something of the breadth of experience that this gentleman will bring to our program.

He was part-time Development Engineer of Bendix Aviation Corporation. He has been with the Gates Rubber Company since 1947, in the positions of Product Application Engineer; Assistant Manager, Product Application Department; Manager, Advanced Products Research and Development Department; Director of Research and Development; Board of Management; Executive Committee; Vice President.

He is a registered professional engineer in the State of Colorado. He has many other interests, as well. He is representative for the Gates Rubber Company in the Industrial Research Institute. He is a trustee of the Midwest Research Institute, Kansas City, and the Engineering Development Foundation of the Univerity of Colorado, at Boulder, Colorado. He is a member of the Northwestern University Regents Council in Denver.

I could go on with his qualifications, but this is enough to let you know we will have some very interesting insights from Mr. Jenkins.

GEORGE H. JENKINS

SUMMARY

While the world's technology is increasing at a very rapid rate, the pace of invention is increasing more slowly—at approximately the rate

of population growth in the United States. Therefore, the conclusion that the Patent Office is buried in work because of the rate of expansion of scientific knowledge is not entirely valid.

From a business standpoint, and from the standpoint of individual inventors, it must be concluded that the recommendations of the President's Commission on the Patent System would generally tend to weaken our system in the direction of the poorer of the European systems. It may be further concluded that actions that weaken our patent system would be fundamentally detrimental to both individual inventors and to American industry.

Two provisions within the recommendations of the President's Commission that appear to be particularly damaging are:

(1) *First to file*—a concept that puts more stress on the timing of paperwork handling than on protecting and benefiting the conceiver of an original idea.

(2) *The option to issue a patent without examination*—process that would probably lead to issuing all patents without examination.

Actions that support the Patent Office in the use of modern machines and devices, and that tend to increase Patent Office responsibility for accurate and thorough examination, are worthy of support. Change for the sake of change and changes that substitute paper handling for judgment can only lead to weakening the world's best patent system.

Introduction

I have been aware of the Report of the President's Commission on the Patent System for some time. I have also been aware of the major changes suggested and have given some thought to their possible effects. There are many suggestions in the Report that appear to have merit. There are others that seem less desirable and that would appear to justify careful evaluation before enactment into law.

Basic Justification for the Study

Before examining a very few of the specific recommendations, I would like to talk about fundamentals. There seem to be two consider-

ations that provided particular motivation for the study by the President's Commission.

Technology Explosion

The first of these relates to the rapid expansion of technology. All of us are the fortunate participants in a period of rapid technological change. This is a period in which the proliferation of tangible devices is taking place at a rate that is actually awesome to an appreciable portion of our population. It is popularly concluded the creativity in the invention and development of new devices is moving ahead on a rapidly rising exponential curve.

We are all well aware that the "technology explosion" is real. The effort being invested in research and in development is increasing exponentially and can be expected to continue upward at a rapidly rising rate for at least several more years.

How many of you are aware that there is no corresponding invention explosion?

Several years ago a man named Hans Von Horteneau investigated this phenomenon. He carried his research back some 100 years and found that the rate of invention increases quite slowly. I have rechecked his premise back to 1940 to obtain some specific data. In the 27-year period from 1940 through 1967, the rate of invention as measured by issued patents, has been increasing at only 3¼ percent per year. Furthermore, the rate of increase has been particularly consistent in the past ten years. I am forced to conclude that while technology is exploding, inventors and inventions are being created at a rate not much over our population growth rate.

International Consideration

A second consideration behind the work of the Commission concerns the generation of compatibility with patent systems of other countries.

Getting along with our neighbors in the European sphere and elsewhere in the world appears to have influenced the thinking of the President's Commission to a substantial degree. Such a posture can hardly be the subject of an argument. However, the approach to patent system compatibility that has been proposed can certainly be examined to see if the principles make sense.

It is my conclusion that the posture taken is passive and perhaps defensive.

A patent sytem that considers the inventor's problems, that involves thorough and expert examination, and that awards to the inventor a well-defined and exploitable claim represents to me a strong system.

All of the patent systems outside the United States fall short of these criteria in varying degrees. If we change our patent system merely to achieve compatibility with weaker systems, we probably will have served political requirements quite well. At the same time, we will have succeeded in reducing the incentives for a large and prolific group of inventors—our own citizens.

The merits of a good patent system lie in their incentives to create wealth and generate commerce. Leadership in improvements and then salesmanship in promoting these ideas might well be employed to improve the international situation.

First to File

Perhaps the key proposal made by the President's Commission is the recommendation that patents be awarded on the first-to-file basis rather than the present first-to-conceive concept. Such an approach would be compatible with most other nations' systems. There is little doubt that a first-to-file concept would reduce the problems of the Patent Office and it would presumably lighten the loads imposed on the courts. For that 1 percent minority of inventors involved in interference actions, such a change in the law might well save money and problems.

On the other hand, there are compelling reasons for looking twice at this first-to-file idea. The most important reason for reconsidering this proposal relates to the time period required to develop an invention in today's complex and scientific world. Generally, many years are involved—frequently more than two years and cases can be cited extending to 20 years. During such a period of time, the statement describing what has been invented has changed many times.

Since early art may be cited against later art, an inventor may lose his patent coverage on his finished invention through an early disclosure. If he decides not to file, he runs a still greater risk that his entire invention may be patented by somebody else.

It is particularly interesting to note that knowledge of what the other fellow is doing could be extremely valuable under such a system.

It is possible that the virtues of the first-to-file system as well as the drawbacks of this system could be evaluated through a thorough study of the impact of such patent systems on the countries in which they are used.

Patents Issued Without Examination

A second recommendation of the President's Commission that should be reviewed in this meeting is the proposal that patents issue without examination at the inventor's option. In effect, the burden of examination and validation is removed from the Patent Office and transferred to the population at large.

The Patent Office, under a no-examination system, becomes largely a processor of papers and a collector of license fees. The values inherent in a patent that has been examined by expert people are removed.

There is a widely shared feeling that a French patent is really nothing but a disclosure and that it is of virtually no value. The French, of course, employ a patent system that does not involve examination. Astute French inventors file for American patents and seem to be highly aware of their value. These same inventors file for French patents on a routine basis, but do not consider such documents to be of much importance.

I recognize that the present proposal suggests making the no-examination patent optional and that ultimately the Patent Office is expected to perform an examination. I suggest, however, that this move would represent a start down a primrose path leading evidently to the devaluing of our patent system.

Conclusion

Our United States Patent Office has done a remarkably good job in administering a constitutional concept of enormous and proven value to this country. I strongly favor legislative action that will acknowledge the expertise of the Patent Office in the courts. I also strongly favor any needed action that will enable the Patent Office to use today's technology and tomorrow's technology to cope with their information handling tasks more effectively. Certainly the use of computers, memory banks, tape storage machines, and other devices should be used to make the patent system effective in terms of today's technological environment.

In conclusion, I suggest that we make no changes that will tend to make the United State Patent Office the proprietor of a paper mill essentially devoid of judgment. Instead, let us work to improve a system that has fully demonstrated its advantages over all others in the world. (Applause)

MODERATOR SMITH: Our next speaker will be James E. Denny.

In the interest of saving time, I will omit much of the material I have on Mr. Denny. I think it is sufficient to say that he is a lawyer and an engineer, that presently he is the Chief of the Infringement and Royalties Division of NASA, and he is also on additional assignment as Executive Secretary to the Committee on Government Patent Policy, Federal Council for Science and Technology. Mr Denny.

JAMES E. DENNY

SUMMARY

Of all the proposals for change to our patent system, two would have a substantial effect on the patent programs of the government agencies. First, are the proposals that would eliminate the grace period, as these would make it impossible for the government to file for patents on many of its inventions because of the government's inability to control the publication of much of its research results. Second, are the proposals that would provide protection, from a defensive standpoint, to a published invention that approaches the protection provided by a patent. As these proposals improve the defensive protection of publications, both economically and technically, the government will probably depend more upon defensive publication, although not exclusively.

After carefully sifting through all of the information that was provided this morning, and correlating this with the statistics that were proposed, I came to the careful conclusion that I certainly hope our court reporter sitting down here in front has been doing a good job, because that was an awful lot of information.

As the government's only representative on this panel, I am planning to approach this problem as it may be peculiar to the government agency.

A couple of years back, Admiral Rickover suggested a way to

eliminate all problems of government patent policy, in government agencies, and that was simply to retire all government patent attorneys on full pay and not hire any more. I carefully have gone through all the proposals up to date to look for a thing like that, so maybe I could support it, but I haven't seen it yet.

In viewing all the recommendations from the President's Commission Report, and the more recent ones, I think the government agencies—and that excludes the Patent Office—have, as I see it, two basic problems. The first is what differences do all of these proposed changes to the patent system make to the government's determination whether or not to patent an invention, and when determinations are made to the patent, what changes would the government have to make?

Please note I didn't even consider the possibility of whether the government should be patenting inventions at all. I know there might be some strong opinion on that, but I am going to go on the theory that right now, the only way to stop the government from patenting altogether is to adopt Admiral Rickover's recommendation.

Assuming that the government is going to patent, it would seem to me that the greatest effect of the President's Commission Report is the elimination of the grace period. The government—and this has been referred to before—has the same kind of problem, and maybe even more serious, as the university. We have very little control, except in classified work, over the publication of the results of our research. This is particularly so with grants, and even in contracts it is quite often that the results of government research are automatically disseminated to a large distribution list.

In NASA, particularly, we have a technology utilization program, and these people receive the invention disclosures before the patent attorneys, and quite often publish them very, very quickly. If you combine all this with the agency's primary concern to disseminate research results quickly, the elimination altogether of the grace period would cause severe hardships on the government agency. The kinds of suggestions being considered now in the subcommittee print, I think would resolve our problems nicely, and we could live with them.

The second problem, and probably more important, is what would be the effect of these recommendations on the government's decision on whether to patent or to publish an invention.

First, John, let me disagree with you on one point—and that is your statement that the government files patent applications almost solely for defensive purposes. They do not file only for defensive purposes—and whatever truth there is in that statement, I think it will be more

true as time progresses. Just like everybody else, the government patents are to reward inventors, and to recognize their contribution—and in speaking for the government employee, everybody knows he is not going to get rich anyway, so he needs some reward.

Next, the government has been and probably will more in the future, file patent applications in foreign countries. When you consider the fact that the government owns inventions—whether or not you think they should, they do—and they publish, this permits the technology involved to be used by everyone, not only in this country, but in foreign countries. The Atomic Energy Commission for some time has had a foreign filing program in which they have protected a lot of the new developments in the field of atomic energy, and they have used these patents in cross-licensing agreements with foreign countries to some extent. I think this probably has saved the United States some amount of royalties that otherwise might have been paid.

NASA has a more recent, and I think therefore more limited, foreign filing program. One of the interesting features about our program is that we are going to see if we can license our foreign patents for royalties.

And finally, I believe the government will patent instead of publish—particularly those agencies who are doing research intended for use by the public—as these are occasions when, no matter how hard the agency tries to obtain public adoption of what they have worked on, it just doesn't work—sometimes for the very reason that exclusive rights aren't available. For this reason, if none other, I think in many cases the government will have to patent the inventions they own.

But, from a defensive patenting point of view, and we do a lot of that, any alternative that is proposed must be sufficient, both economically and technically. I think the most recent proposal that has been put into effect by the Patent Office, which permits you to file with an express abandonment, really isn't sufficient for our needs, particularly from an economic point of view. Once you have filed your patent application, and there is a lot of work prior to that, it seems as if you have invested 50 to 75 percent of the money you are going to, and once you are that far down the road, and with the other reasons for patenting, I think in most instances it would probably be prudent to go on and obtain the patent.

Under the Commission's recommendation, with no grace period, a publication becomes for defensive purposes almost equal to a patent. Note that I said almost, because I think the most effective publication is the one in the Examiner's search file. But it comes close, and under this recommendation, perhaps the government would rely more heavi-

ly on publication than they now do.

Another alternative for defensive publication is proposed in the recent subcommittee print. This alternative allows the inventor of an invention that has been published to swear back and prove inventorship up to a year prior to the date of publication, just as the applicant can swear back a year prior to his filing date. In this regard, this proposal pretty much equates the publication for defensive purposes with a patent application. If this type of proposal were adopted, perhaps, again, the government would move more toward the publication route than patenting.

But we have a couple of problems, really, with this last proposal. In order to enforce your publication against later issued patents—and this is in Section 192 of this subcommittee print—the government would have to review all patents issuing, review their publications, try to find conflicts, and if a conflict is found, take a positive action in the Patent Office within a year. I don't think the government can do this, except maybe in certain very limited areas, like atomic energy.

I also don't think they can do it because of the manpower involved. And besides that, the fact that the government—or let's say NASA—going to the Patent Office and telling the Patent Office, "You made a mistake . . . you ought to cancel this patent," would probably cause some bad press if no challenge was made to the government first. So for that reason, it probably would not happen.

However, insofar as Section 282 of the subcommittee print—and I am not sure how that is to be interpreted—would permit the government to go ahead and publish, and then wait until someone comes in for infringement, and insofar as in that situation we could then go back a year behind the publication date, just as an applicant or a patentee could, then again this may put some teeth into this type of publication and encourage its use.

Finally, a talk by a government employee is never complete without the statement that the opinions expressed may not reflect those of my sponsor. Thank you. (Applause)

MODERATOR SMITH: The next speaker here, not only is an inventor with a number of patents issued in his name, but is the grandson of two inventors, so the inventive genes probably run deep in this gentleman's heredity. He is Mr. Lloyd Spencer, now connected with the firm of Lyon and Lyon, in California.

With this as a preface, I shall read you his note to me in which he said:

> I would like to close this outline with a statement regarding the wealth I have accumulated. However, monetarily, there has been none. Yet, I have gained much experience, some of which I believe has been useful to my clients.
>
> Typically of those who invent, I have high hopes in regard to my current project.

That is the end of the quote, and with this, I give you Mr. Spencer.

LLOYD SPENCER

I am afraid I am going to make this awfully short. I know that is going to be a disappointment to you.

Honorable Judge, and Ladies and Gentlemen.

My whole experience has been one of helping inventors, and I am going to confine my talk more or less to the problem of the individual inventor.

One thing that I was gratified to find is that the organization has in their reports apparently had the effect of changing the proposals very drastically. The latest McClellan proposal takes into consideration practically everything that was discussed this morning, and I can't find much wrong with it. Indeed I find myself in agreement with the current patent law that is being proposed and I hope they don't change it too much.

The first speaker, Mr. Rinker, is a professional inventor and I am an amateur inventor. One attorney in the office referred to me as the third generation of unsuccessful inventors. I don't like that expression. I think "amateur" is better.

I am also, a professional inventor, because I had a little problem with Internal Revenue that said some of the deductions I wanted to make were entirely a matter of hobby.

They looked at my shop as the place I play in. I don't play in it. This is a research lab. (Laughter) But they took a very dim view of this, and I had to appeal it.

Finally I am glad to say that I was recognized as a professional inventor, and I can make the proper deductions that a professional inventor can make.

I noted a comment that Mr. Gray made about outside inventors, "Outside inventors, very poor quality." I wonder if that has been the

reason for my lack of success. I don't like to think so.

I have another term for it, not original with me, but the individual inventor as he approaches manufacturers learns very soon that there is a thing known as the NIH syndrome. You have probably heard of it, "Not Invented Here." It's a rough one.

But we talk about these various proposals of whether we have a year's grace period or not, and yet, no matter which way you change the law, there are so many other factors that make the role of the individual inventor a tough one that the overall picture of his problem probably won't change very much.

It is simply rough to be an original inventor, and I am glad to note that Dr. Kincaid indicated that the role of the individual inventor is on the way out. I and a few others like me won't be around very much longer which may be fortunate.

Beyond that, I haven't very much more to say. (Applause)

MODERATOR SMITH: Thank you, Mr. Spencer.

The program calls for a research administrator's report by Mr. Green.

He has felt, as I did, here, that in the interest of hearing these people who are out on the front line of invention and promotion of inventions, they should be heard.

However, he does have a very brief summary of another matter, another report which was surfaced this morning, so I would like to have Mr. Green give us a short summary, please.

JOHN C. GREEN

As these deliberations have gone on in Washington about the Presidential Commission's Report and the successive drafts of legislation, there were two issues which seemed to be unresolved, and which have caused confusion.

The first of these is, admitting the value of a simplified interference practice, how far should a diligent person be permitted to swear back to prove priority? And the second is—is some sort of opposition or

cancellation proceeding preferable to granting the patent as it is done normally? Recently we went out to about 325 of our, let me say, most seasoned respondents and got in, as of yesterday, about 105 responses, and I want to give you this information briefly today, because I know the Patent Office wants to receive it. We found that 69 of the respondents are willing to accept some abbreviation in the time that they can go back to prove priority.

There were four alternatives offered: One year, two years, three years, and this combination publication and filing date that Jim Denny mentioned. I should mention that the last was a bad fourth in the recommendations, particularly from the private inventor, because while the medium-sized company and the government and the universities have access to channels of publication, ordinarily the private inventor does not. Therefore almost none of them thought that that was a good idea. About 69 respondents would accept some abbreviation, while 33 would prefer the current system.

Then separately we looked at the question of: "Should there be an opposition proceeding before issue, a cancellation proceeding after issue, or continuation of the present situation?" And here we found a very similar breakdown. About 63 found either opposition or cancellation acceptable, whereas 43 somewhat vehemently would prefer the present system. Now, the 63 broke relatively evenly. People who favored opposition, I think Mr. Prasinos mentioned their views eloquently, they didn't want to see a cloud on the patent after it was issued. Those that favored cancellation thought, "Let's get on with it and get our patent and take our chances afterward." This information will be refined, amplified and published in an early issue of *IDEA*.* However we wanted to make it available today.

This concludes our part of the program. (Applause)

MODERATOR SMITH: We have a few questions which have been surfaced here, and we are asking them—I am asking Mr. Green and Mr. Harris to go over these questions, because we are running short of time, and I don't want to intrude any more than I have to on the next season.

There is one bit of information that I think you might be interested in. In connection with the question that was asked me concerning some 80 percent of the patents being defensive, Dr. Sanders gave me this information. From their studies of assigned patents, 95 percent of them are tested for commercial use and feasibility studies. Eighty

* See *IDEA*, Vol. 12, Nos. 2-3 (Summer-Fall 1968), pp. 753-790.

percent were laboratory-tested, even though they were not ultimately used.

I think this bears out, in part, at least, my own observations, which were that very often so-called "defensive patents" only become that at some later stage than the application stage. Applications are filed, I think because "hope springs eternal." I think most inventors file in the hope that their invention will be good for something.

I thank you very much for your interest, and for your attention. (Applause)

Part II—Trademark Outlook

DIRECTOR L. JAMES HARRIS: In a very trenchant recent article in *Advertising Age,* entitled "Coming Crisis in the Trademark System," the Moderator-Commentator of Part II of the First Session of this Conference wrote that, "So much of our economy is built upon trademarks that any weakening of the trademark system is bound to have an adverse effect upon business as we know it." By a happy *planned* coincidence, the author was invited to moderate, and to comment on, this session in which we hope to present some factual evidence bearing on his conclusion. It gives me great pleasure to introduce the author of this article, a leading trademark lawyer who is associated with the firm of Kaye, Scholer, Fierman, Hays and Handler of New York, Mr. Sidney A. Diamond.

MODERATOR-COMMENTATOR DIAMOND: Thank you, Professor Harris.

Ladies and Gentlemen, I feel the inexorable pressure of the hands of time.

I am sure we are all aware that these programs have a terrible way of falling behind schedule. I therefore will get on to business, suppressing my natural exuberance and the usual tendency to start off with a few humorous remarks.

We live in a world of explosions, both literal and figurative, and this is not without its ironic consequences. To be specific, there has been a communications explosion, attributable to technological advances that enormously expanded the reach of the so-called mass media; and this has greatly increased the economic impact of trademarks. But there is a serious communications gap about trademarks themselves.

Trademarks are marketing tools that have become an essential part of our business and commerce, both at home and abroad. At the same time, they are a type of industrial property that exists by virtue of some rather special legal doctrines.

It has become a tired joke that marketing executives and lawyers frequently do not see eye-to-eye about trademarks. This failure of communication is nothing to be amused about. It is—at the least—economically wasteful; and it can have serious financial consequences.

Like other communications gaps, this one can be closed only through knowledge. The Patent, Trademark, and Copyright Research

Institute of The George Washington University has been collecting the kind of data that will be needed to solve the problems I have been speaking about.

Speaking very broadly, there are two main areas that have been illuminated thus far by the Institute's pioneering studies. First, information is being gathered about the economic aspects of trademark utilization by United States companies. Second, the studies are bringing to light specific elements in legal trademark systems that U. S. industry considers undesirable or unsatisfactory. The accumulation of such knowledge is an essential first step toward our goal of modernizing this type of industrial property.

To report on some of the results already achieved, we have with us two members of the Institute's Research Staff, Mr. Lightman and Mr. Brufsky. After they have spoken, we will hear from Anthony DeSimone, and I will then reappear in my role of commentator. The session then will conclude with questions from the floor, and I ask you to write out your questions as we go along, so that the limited time available for discussion can be used most efficiently.

Our first speaker is Joseph M. Lightman, an International Economist with the Bureau of International Commerce of the United States Department of Commerce. He holds B.A. and M.A. degrees in economics from The George Washington University, has participated in the Graduate International Business Program at American University, and has lectured to law classes at both of these universities on the subject of trademarks.

He was formerly with the Department of State and with the Federal Trade Commission as an Economist. He was a member of the U.S. Delegation to Industrial Property Conferences at Bogota, Colombia, and, more recently, at Stockholm, Sweden, last year. He has also written extensively for various publications in the industrial property field.

I am happy to present to you Mr. Joseph M. Lightman. (Applause)

JOSEPH M. LIGHTMAN

SUMMARY

The importance of trademarks in the U. S. economy, their role in business management's marketing operations, and the acknowledg-

ment by many leading U. S. manufacturers that trademarks are their most valuable forms of business property, have prompted a thorough study by the Institute of the economic aspects of trademark practices of U. S. firms. The first phase of our study dealt with the practices of manufacturing firms, through a sampling of 75 of 300,000 plus U. S. manufacturers. Our sample ranged from the top 50 firms that account for about one-third of the value of all products made and sold by the 300,000 to those smaller firms with annual sales of less than $1 million.

In the international field, a general pattern emerged with respect to trademarking abroad by our respondents in terms of a progressive increase in the number of trademarks applied for and registered abroad by size of the firm. Decisions on where and when to register abroad were governed by such factors as probability of use of the mark coupled with contemplated sales for the goods, defensive protection against "piracy," and facilitation of licensing agreements. Geographically, U. S. registrants concentrated their registrations in Canada, Western Europe, the British Commonwealth and Japan. They were particularly disturbed about certain "first registration" requirements in many countries with no recognition of prior use and also the lack of uniformity between the U. S. and foreign classification systems. This latter problem may be alleviated by the U.S. Patent Office's current practice of cross-referencing its trademark registrations to comparable classifications in the International Classification System.

As the economist of this panel, I gladly leave the legal aspects of our discussion of the U.S. "Trademark Outlook" to the three legal experts. Any recommendations relative to the outlook for modernizing our trademark system will have to come from them.

I have taken the easy way out by directing my remarks to a research project the Institute now has under way on the economic role of trademarks, as well as to some underlying international trade factors which may be considered within the context of our discussion topic.

It has been my impression that unlike the situation in patents, detailed research into the economic aspects of trademarks and their value as business assets has long been neglected.

When one considers that trademarks are the focal points around which multimillion dollar advertising and merchandising campaigns are built, and that they are acknowledged by many firms as their most valuable forms of business property, trademarks are subjects worthy of

thorough study in terms of their economic role in corporate growth patterns. Today about 98 percent of the advertising expenditure in this country, which has grown from a little less than $12 billion in 1960 to about $17.5 billion in 1967, is directed to the selling of products and services using trademarks.

Also, to be particularly noted, is a study recently completed by the Congressional Joint Economic Committee's Subcommittee on Economic Progress, entitled "U.S. Economic Growth to 1975: Potentials and Problems," predicting a gross national product annual growth rate of between 4 and 4.5 percent to 1975, with the total GNP reaching well over a trillion dollars by that year. This expected economic growth pattern, which has also been projected in many other GNP studies, and its impact on investors, producers, and consumers, will affect all aspects of corporate planning in the industrial property rights field, not the least of which will be the role of trademarks as identification, guarantee, and advertising factors in projected growth plans.

Thus, The George Washington University Patent, Trademark, and Copyright Research Institute now has under way a study project on the economic aspects of trademark practices of U. S. firms.

We have completed the first phase of our study, namely, that on manufacturing firms, and are now looking into "service mark" practices of banks, insurance companies, transportation companies, and others that provide services as distinct from goods. We also plan to delve into the trademark practices of organizations that use collective and certification marks, and then into practices of wholesale and retail firms that have goods made for them under trademarks. I hope that all of you will take time to read our first two reports appearing in the Fall 1966, and Winter 1967-68 issues of the Institute's publication, *IDEA*.

Today, I would like to discuss briefly the scope of our survey within the United States manufacturing sector, and then elaborate somewhat on the foreign aspects of our findings. Mr. Brufsky, my colleague, and legal expert on the project, will discuss the domestic side of the picture, with particular reference to our findings on trademark values. Time permitting, I hope he will also discuss some of our preliminary findings on service mark practices.

In our recently completed study on economic interests of manufacturing firms in trademarks, our sample consisted of about 75 firms. At first blush, this may appear *de minimis,* when one considers that there are over 300,000 manufacturing firms in this country. But, taking a closer look at the picture, I note that the firms in our sample own and use about 5,000 trademarks in the United States, and many more thousands of marks abroad.

Another factor to consider is that in the United States, 50 manufacturing firms account for about one-third of the value of all products made and sold by the aforementioned 300,000. We received questionnaires from about a third of these leading 50 U. S. manufacturers, which we feel represents a good sampling base for those that account for a substantial part of this country's manufacturing. These leading firms in our sample are of course in the $1 billion and above annual sales class, and are among the world's leading private multinational organizations.

Our response rate was admittedly less favorable from the medium-sized and smaller firms to whom we also sent questionnaires. In this category, we selected for our questionnaire mailings about 500 companies, with annual sales ranging from less than a billion dollars to as little as $1 million per year.

As I mentioned earlier, Mr. Brufsky will elaborate on our findings within the context of these firms' domestic activities. For the moment, I would like to cover the foreign side of the picture.

First, just to set the scene, I note that the total annual value of U. S. exports has increased from about $20 billion per year since the U. S. export expansion drive began in 1960, to approximately $31 billion last year. While it is not possible to calculate precisely the export value of trademarked products, an analysis of the U.S. Census Bureau's export trade figures contained in its annual statistical publication (FT 410, December 1967), indicates that about 58 percent of the overall U.S. total exports in 1967 consisted of the type of products generally marked with and sold under trademarks.

While only a very small percentage of the 300,000 plus U. S. manufacturing firms are engaged in production for export, trademark-type products, nevertheless, represent a majority of the value of our total exports, and constitute strong prospects for stepped-up export promotion activities. The balance of 42 percent of U. S. export trade is accounted for primarily by the tremendous quantity of fungible products exported from the United States, such as grain, ores, and other raw materials. Although no reliable statistics are available, even these products may share in goodwill of the type represented by a trademark, either because the buyer relies on the reputation of the seller's trade name or because, as in the case of petroleum products, some grain shipments, and the like, the tankers themselves carry the trademark of the exporters.

Each year there are over 800 major international trade fairs and exhibitions which are open for participation by U. S. manufacturers. At certain of those selected fairs in which the United States govern-

ment participates directly in cooperation with business, the United States Department of Commerce's Bureau of International Commerce stages commercial exhibitions that would appear most likely to help U. S. producers increase exports of those products identified through market research as having the highest overseas sales potentials.

Additionally, the U. S. Department of Commerce maintains six permanent U.S. Trade Centers (i.e. or commercial showrooms) in London, Frankfurt, Milan, Stockholm, Tokyo, and Bangkok, for display and demonstration of U. S. products in central marketing areas where the potential for such products is high and continuous.

U. S. firms may also show samples of their products with descriptive literature, for 30 days, at the Bureau of International Commerce Sample Display Centers in Beirut, Nairobi, and Bangkok.

Other Department of Commerce exhibit programs, such as Mobile Trade Fairs and America Weeks, and the United States Trade Mission Program, are described in a booklet published in April 1968, by the Department, entitled "Introductory Guide to Exporting."

Returning now to the Institute's survey, I note that while there were, of course, exceptions, a general pattern emerged with respect to trademarking abroad by our respondents in terms of a progressive increase in the number of trademarks applied for and registered abroad, by size of the firms.

Most of the respondent firms with annual sales of over $1 billion registered abroad all of their house marks and about two-thirds of the product trademarks they use in the United States. These firms reported that they registered anywhere in from 10 to 50 different countries each of their marks registered in the United States. The range of their total foreign registrations extended from about 400 in the case of one company to over 7,000 in the case of another. They had relatively few marks registered abroad that were not first registered in the United States.

The respondent firms in the so-called medium range of annual sales, that is, between $100 million and $1 billion, also registered their house marks abroad, and about a third of their U. S. product trademarks in foreign countries, as compared to about two-thirds for the larger firms that I previously mentioned. These medium-sized firms reported that they acquired from one to 20 foreign registrations for each U. S.-used mark. Their total marks abroad ranged from as few as 60 to as many as 2,300 per company. They had very few marks used in foreign countries but not in the United States.

Most of the smaller firm respondents, that is, those with annual sales of less than $100 million that did any business throughout the world,

registered in foreign countries about one-fourth of the product marks they use in the United States. Each of their U. S.-used marks was registered in anywhere from one to 13 foreign countries. Their total foreign ownership of trademarks varied from less than 100 per company to about 900 for the largest one. None of those respondents reported that they had not registered and used marks abroad not first used in the United States.

Decisions by all of the respondent firms on where and when to register in foreign countries were governed by a variety of factors within the context of managements' overall marketing campaigns. Many respondents noted that foreign registrations were determined by probability of use of a mark coupled with extent of sales contemplated for the goods. Actual levels of business done and market surveys conducted in countries served as decisive factors in determining whether or not to register a particular mark. Many companies also noted, in addition to the sales potential of particular markets, that defensive protection of their marks in so-called "pirate countries" was a highly important consideration.

Peculiarities of registration requirements in foreign trademark laws were also governing factors. Various firms noted that the existence of subsidiary or other affiliated facilities and of licensing arrangements with these and other entities were important further considerations in developing foreign trademark programs. A number of firms particularly wanted to see that the goodwill of their products and the reputation of their licensees were fully protected abroad through proper registration and maintenance of their marks.

The geographic pattern of foreign registrations was fairly consistent. Most of the respondents that did any business outside the United States registered their trademarks in Canada. Then, depending on the size of their marketing operations, they registered in selected countries, generally in the following regional order of priority: European Common Market, British Commonwealth, other European countries, Latin America, Japan, the Middle East, other Far Eastern countries, and Africa. In this general regional order of priority, they concentrated on those countries where United States nationals are entitled to national treatment, (that is, equal treatment) on the basis of treaty commitments with the United States regarding the protection of trademark rights.

In this connection, they sought out first, in those regional areas of interest, those countries that are members of the basic intergovernmental agreement in this field—that is, the "Paris Union" International Convention for the Protection of Industrial Property—to which the

United States and about 85 other countries adhere. This Convention assures nationals of member countries equality of treatment in other countries of the Union in applying for and maintaining trademarks, as well as patent rights. U. S. nationals also get certain special rights in the other member countries, such as a six-month, "right of priority" for trademark applications, waiver of prior home registration requirements in the case of those countries that are members of the 1958 Revision, and specific commitments regarding protection of service marks.

Also of interest in their registration patterns were the various countries, about 20, with which the United States has concluded bilateral commercial treaties, that is, so-called Friendship, Commerce, and Navigation Treaties, since 1945. These treaties customarily include a "national treatment" provision on trademark and patent matters, and also contain other useful guarantees against discriminatory treatment in trade matters generally.

The 1929 Inter-American Trademark Convention was also pertinent in the trademark registration planning activities of those respondents interested in the Latin American market.

In closing, I should also mention the attitudes expressed by our respondents regarding the lack of effectiveness of certain foreign laws in protecting their trademark rights. A number of firms were disturbed about the prior registration systems of many foreign laws, where the first to register a mark is presumed to be the owner, and where "prior user" rights are difficult to establish and enforce, even for so-called "well known" and "famous marks."

Several respondents complained about the problem of having to acquire separate trademark registrations in each country in which they were interested, while certain of their foreign competitors could utilize the facilities of the Madrid International Trademark Registration Agreement in efforts to effect an "International Registration" for one or more of the 21 member countries.

Some others complained about the lack of general uniformity between U. S. and foreign trademark classification systems, indicating that it was difficult for them to cope with these differences, particularly when filing in Western Europe. Perhaps the cross-reference system now being used by the United States Patent Office to identify on U. S. trademark registrations comparable classifications used by countries that apply the International Classification System may help resolve these complaints.

Having provided some economic and commercial type background on the subject of trademarks, and perhaps encroached on some of the

legal aspects, I thus leave to our legal experts complete discretion on the views to be offered by this panel regarding the "Trademark Outlook" within the context of our overall subject on "Toward the Modernization of Industrial Property in the United States."

I hope that their insights into this situation, as well as yours, of course, may be enhanced by the results of our research into the economic side of the picture.

Thank you. (Applause)

MODERATOR DIAMOND: Thank you very much, Joe.

Our next speaker, Allen D. Brufsky, is a practicing attorney in Washington, D. C. He holds an M.E. degree from Stevens Institute of Technology, and the J. D. degree from Georgetown University. He has been associated with this Institute for the past three years as a Research Associate.

I am happy to present Allen Brufsky.

ALLEN D. BRUFSKY

Thank you, Sidney.

Joe Lightman has described the underlying purpose of the Institute study relating to the economic impact of trademarks. I shall elaborate further on this purpose and highlight some of the results relative to the domestic side of the picture.

All of us here know that a trademark can have value. A trademark functions as the indicia of origin of product. It is the commercial signature of the manufacturer or seller and symbolizes the goodwill or confidence established by him in his products.

This goodwill, or confidence, once established, is immediately conveyed to the purchaser through the trademark—and immediately conveys to the purchaser that the product meets the standard that is expected of it. Without it, the manufacturer or seller is just another who has recently entered the marketplace with an unproven product. The manufacturer has no established position. With it, the integrity of his product is assured.

Let me illustrate this phenomenon by means of an actual example. A number of years ago, a leading producer of mining equipment in the United States sought to expand its product line by acquiring a company which made a well-known brand of air compressor. Promptly, the mining company replaced the pump company's name on the product with its own. There has been at least one instance where after replacement of a worn compressor, no one would enter the mine, because the dependable and reliable compressor had been replaced by an unheard of brand. Of course, the products were identical. In this instance, the pump company's mark had value, and the mining company's mark did not.

In the words of the late Justice Frankfurter, speaking for the Supreme Court in *Mishawaka* vs. *Kresge*:

> A trademark is a merchandising short-cut which induces a purchaser to select what he wants, or what he has been led to believe he wants. Whatever the means employed, the aim is the same—to convey through the mark, in the minds of potential customers, the desirability of the commodity upon which it appears. Once this is obtained, the trademark owner has something of value.

But, is there any data or evidence to corroborate this conclusion? This is what the Institute study has developed.

Since a trademark is an intangible asset, most companies surveyed could not assign a specific dollar value to their marks. But, when asked by us to attempt to assign a specific economic value, the majority of those who did answer estimated this value to be "in the millions." Where the public had gained confidence in a particular brand name, the mark's value for future use and exploitation was considered by the owner "to be great but undeterminable."

Typical replies included such statements as:

> Its specific value cannot be determined, although it is considered one of the corporation's most valuable assets. Its image inspires confidence in the public and assurance to all of inherent quality in whatever product it occurs with. Through this continuous maintenance of quality in a variety of products, sales have continuously increased along with the product line and thereby corporate growth.

> It is difficult to assign a value to this trademark, which has contributed in a most significant way to making this particular brand of ——— among one of the most widely known throughout the world. It has been a major factor in the growth of the parent company's subsidiary engaged in the manufacture and sale of ———. I personally would estimate its value in the millions.

> The corporate emblem is on all advertising and all products sold

> which lend themselves to a trademark. Because the corporate emblem has been synonymous with ——— quality, we place a value of several millions on the mark.
>
> ———
>
> As to the value of goodwill to be assigned to it, it would appear to be the value of our total sales.

One company even reported that more than $125 million had been spent in the direct promotion of its house mark through every available media. Furthermore, we did acquire data to pinpoint some of the factors which various companies would use to evaluate the economic worth of their trademarks. Two different formulas were brought to our attention as "rules of thumb," for estimating the worth of a trademark to that particular company.

In one formula, the respondent takes the yearly average net profit for that part of a business using the trademark over the past 10 years. That figure is multiplied by a factor of four to 10, depending upon management's consideration of the numerical degree which could be considered a weak or strong mark, within this range.

A second respondent estimates the annual sales loss of a particular business should use of this mark be discontinued. That figure is multiplied by the net profit per sales dollar for the year for the business pertaining to the mark. Then this figure is multiplied by the number of years management believes it would take to reestablish a new mark for the comparable sales reputation. As can be appreciated, this sum can be considerable.

During the last year, the Institute has extended its initial inquiry into the economic aspects of trademark utilization to the service industries. Inquiry was made also by using the survey technique. We are still in the process of receiving replies, and therefore we do not have a complete picture or analysis of service industry utilization of trademarks as yet. However, preliminary indication is that service marks play just as vital a role in this industry as trademarks have played in connection with the promotion of consumer products. For example, one insurance company which answered our questionnaire, when asked to evaluate the worth of their mark, answered:

> Although we appreciate your appetite for precision, we cannot give you a rational dollar estimate of the value of our service mark. We regard it, quite literally, as invaluable.

For the first time, we have a comprehensive body of developed data to support the conclusion that trademarks are valuable property. As such, it is understandable that our respondents felt that there should

be laws which protect trademarks to their fullest. In this connection, our survey elicited comment regarding past experience under existing trade mark law in order to throw light on the weaknesses companies consider to exist under the United States law, and the economic consequences that have flowed from these weaknesses.

In the forefront of complaints with the United States statute was the uncertainty and lingering doubt still remaining in some cases after registration—doubt regarding the clear right to continue to use the registered mark after considerable promotion and investment in fixing the mark in consumer preferences. Some companies reported that they selected a mark, then used, registered, and promoted it, only to find later that a prior "common law" user had superior rights in at least some geographic areas. The registrant was possibly not only precluded from trading in that geographical area, but the "common law" user was in a position to reap a windfall from the mark's promotion at no expense to himself. For example, a well-known restaurant operation could not stop a diner from using its service mark in Greensboro, North Carolina, because of this outstanding common law right.

The common law relating to trademark usage, and the Lanham Act, at least in Sections 33 (b) (5) and 33 (b) (6), recognize prior use as a defense in an infringement action. This problem area presents a question of conflicting equities. Recognizing that under equitable principles, the rights of the first user should be respected and protected, many companies nevertheless questioned whether a second good faith adopter and registrant should, in effect, have his investment undermined, and also whether the first user should be able to reap a windfall from the promotional activities of the second user, under the present U. S. statute.

About a fourth of the respondents indicated that one of the main problems was a lack of comprehensive reference sources for definitive checking of used, but unregistered trademarks. As to possible solutions, a number of respondents suggested that "common law rights" in a trademark should be cut off completely by registration, so that the registrant will be afforded a greater degree of protection than is now available to him. Those who recommend this change point out that adequate safeguards do exist in United States trademark law. Registration is tantamount to exclusivity after a stated number of years. In the interim, opposition or cancellation proceedings are available.

At the other end of the spectrum is the protection of adopted names which have not been used, but whose promotion has begun or is about to begin after substantial investigation and expense has proved the mark to be registrable. Since trademark rights flow from use only, the

need for some interim protection was expressed in a number of the replies received. As most of us know, legislation is presently pending in the Senate to rectify this situation. This bill states that an application for federal registration of a mark may be made, even if the mark is not in use. However, no registration will issue until the applicant later files in the Patent Office a verified statement that the mark has been put to use in interstate commerce.

A time limit is fixed for filing the required statement of use: any time after the application is filed, but not exceeding six months following publication of the mark. Failure to file this statement results in abandonment of the application.

The mark is first published prior to examination, which is separate and apart from publication for opposition purposes after examination. This first publication date establishes priority for the adopted mark, unless prior to the initial publication someone else has commenced use of the mark, or one confusingly similar thereto, or another has filed a previous application based on intended use which was followed by the required verified statement of use, or has acquired priority based on a foreign application. Tony DeSimone will have more to say on this particular subject, so I will leave it at that for the time being.

Thus, in summary, the first phase of our study into the economic aspects of trademark utilization has been completed. As previously mentioned, a much more comprehensive report has recently been published in the Winter 1967-1968 issue of *IDEA*.

As I have also mentioned, we are currently looking into the economic aspects of marks used in the service industries, always with an eye on the need toward modernization in this field.

At a later date, when we also plan to survey the trademark practices of the retail and wholesale trades and the practices of associations and other groups that use collective and certification marks, I hope that the results will be good. (Applause)

MODERATOR DIAMOND: Thank you very much, Allen.

I think all of us must recognize the extreme importance of the research studies that the Institute is carrying on in this field.

As the next speaker, I am happy to have Anthony R. DeSimone. He is a graduate of Harvard College and Boston University Law School, and is a member of the Massachusetts and Federal Bars.

For a long time, he has been giving a great deal of his time to activities in professional and trade associations. Just to give you the

flavor of the kind of positions he holds, by reading a few of the current ones and leaving out the past ones, he is Chairman of the American Patent Law Association Committee on Trademark and Trade Name Protection, Chairman of the Pharmaceutical Manufacturers Association Committee on Trademarks and Copyrights, a member of the Executive Committee of the American Group of AIPPI, and Executive Vice President of the United States Trademark Association.

I take pleasure in presenting Mr. Anthony R. DeSimone.

ANTHONY R. DESIMONE

SUMMARY

Since World War II there has been a great increase in trademark activity, and trademark rights are granted protection throughout the world. In most countries such rights are claimed by applying for registration of the mark before any actual use is made of the mark. At most the applicant must indicate a bona fide intention to use. The United States remains virtually the only counry which requires actual use before trademark rights can be claimed although there is legislative activity seeking to amend the law to permit a claim to be made prior to use and based upon intent to use.

There has also been increasing recognition of the right of a trademark owner to license the use of his trademark to third parties. Many countries are now incorporating licensing provisions into their laws.

Trademark registration is also facilitated by the development of international arrangements such as the Arrangement of Madrid for the International Registration of Trademarks, The Arrangement of Nice for the International Classification of Goods and Services and the Afro-Malagasy Union. Even the United States has been investigating the desirability of adhering to the Arrangement of Madrid or supporting a new Arrangement for the International Registration of Trademarks.

At the same time there have been, in recent years, some challenges to the trademark system from government and some segments of the

academic community, which seek to view trademark rights in monopolistic terms rather than as competitive tools. Hopefully this view will not prevail and trademarks will continue to be recognized as competitive tools in a competitive economy.

Thank you very much, Sidney.

As one who has spent the past 20 years working in the area of trademark law, and who is associated with a company and an industry, the pharmaceutical industry, which is very much a trademark-oriented industry, I am very pleased to have been invited to participate in this discussion on the economic aspects of trademark utilization and the value of trademarks as business assets.

With the enormous growth in business activity in the past 20 years, there has been a tremendous upsurge in trademark activity around the world, and there is scarcely a country where some form of trademark protection is not available. With this great increase in activity, the task of finding a trademark clear for use on a worldwide basis has become a formidable one. Consequently, the necessity for establishing a right in a trademark as early as possible in the development of a marketing program is extremely important. Fortunately, most of the countries of the world make this task easier by permitting the registration of a trademark without the necessity of prior use. At most, all that is required is a bona fide intention to use. The United States remains virtually the only country in the world which still requires actual use as a prerequisite to applying for registration of a trademark.

About 10 years ago, a number of Bar groups considered the desirability of changing the law to permit the filing of an application to register a mark based upon "intent to use." A bill was drafted and introduced into the Senate by Senator Dirksen. The bill contained provisions similar to those which the Canadians had incorporated into their law in 1954. This permits the filing of a trademark application based upon intent to use. The applicant then has until six months after publication of the mark in which to file an affidavit that the mark is now in use. If the affidavit is filed, the application is allowed to proceed to registration. If it is not filed, the application becomes abandoned.

Several revised Dirksen bills have been filed in the Senate, the most recent being S. 1858, which was introduced on May 24, 1967, and referred to the Senate Judiciary Committee. To date, no hearings have

been held on any of these bills. While the bill appears to be favored by a majority of the trademark Bar, there is a sizable group of traditionalists who are opposed to the concept of "intent to use," and who, conceivably, would voice objection to the bill. Consequently, it is difficult to predict what the outcome of this legislation will be.

The French have moved even beyond the concept of intent to use. Their new law, which became effective August 1, 1965, provides that only rights based upon registration are to be recognized. The law provides for a three-year period of protection from August 1, 1965, for a prior user. This will expire in August 1968. If such marks have not been registered by then, anyone will be free to register them and obtain rights over the prior user. This provision of French law has led to a rather interesting development. A notorious industrial property thief who fled from this country to Europe to avoid arrest here has been publicizing this provision of French law to trademark owners with the warning that if they do not register their marks which are presently in use prior to the August 1, 1968, deadline, a third party may do so. This is probably the first time in history that a trademark pirate has advertised his intentions in advance!

The matter of trademark use has another side to it. A trademark functions as a marketing tool, that is, its purpose is to identify and distinguish the goods of a particular manufacturer in the marketplace. If the trademark owner is not using the mark for this purpose, then he should be deprived of his right in it. Most countries of the world recognize this, and their laws provide that non-use of a trademark for a specified number of years will render the registration vulnerable to an action for cancellation. Our own Lanham Act specifically includes a provision, Section 8, requiring that between the fifth and sixth years of registration the trademark registrant file an affidavit that the mark is in use, or explaining its non-use. Otherwise, the registration becomes void.

However, for many years, Germany had no non-use provision in its law. As a consequence, the German register has become cluttered with thousands of unused trademarks, which are so jealously guarded by their proprietors that seeking to obtain a registration in that country can often be a traumatic experience. Fortunately, with the advent of the new West German Trademark Law, which went into effect on January 1, 1968, this situation will now change. This law has a five-year non-use provision in it, so that beginning January 1, 1973, many of these German registrations will be vulnerable to actions for cancellation.

I have mentioned the fact that France and Germany have recently adopted new laws. Many other countries have adopted new trademark

laws, or have updated existing laws. In Europe, Denmark, Finland, Norway, and Sweden adopted new laws a few years ago, as did Eire. Even the Iron Curtain countries have come to recognize the importance and valve of trademarks, if East-West trade is to be encouraged, and many of them have adopted new laws or amended existing laws. These have included Albania, Bulgaria, Czechoslovakia, Poland, Yugoslavia, and Russia itself. At the present time, many United States firms are availing themselves of these laws and registering trademarks in Communist countries, particularly Czechoslovakia, East Germany, Poland, and Yugoslavia, and some also in Russia.

Virtually all of the new nations which have emerged from the post-war breakup of the large colonial empires have adopted trademark laws for their countries. One of the significant trademark developments in this area has been the formation of the African and Malagasy Union by 12 of the former French colonies in Africa. This Union has set up a single Industrial Property Office in Cameroun for the filing of patent and trademark applications. This office then issues a single trademark registration which is effective in all the countries of the Union, thereby saving the trademark owner the time, effort, and expense which he would have to incur if he had to file a separate application in each of the 12 countries.

After its separation from France, Algeria adopted its own trademark law in 1966, and a new law was adopted in Nigeria as recently as June, 1967. It is interesting to note that each newly independent country has tended to follow the jurisprudence of the country of which it was a part. Thus, the countries which were formerly part of the British Empire or Commonwealth have patterned their laws on the British system, while in the former French areas, the law usually follows the civil law system.

With the growing complexity of modern business practices and enterprises, and particularly with the formation of subsidiary companies, affiliate companies, and joint enterprises, licensing has become an increasingly important aspect of trademark operations. For many years, the legal concept that a trademark identified source or origin of a product with a particular manufacturer precluded the lawful licensing of a trademark to a third party. Slowly this concept has been made to give ground, and has now been modified to the extent that in most countries licensing of trademarks is deemed lawful, where the proprietor or licensor excercises control over the character and quality of the goods. Licensing has been given statutory recognition in Section 5, the related company user provision of our own Lanham Act.

In the United Kingdom and the many Commonwealth and other

countries which follow the British tradition, licensing has been given statutory recognition under the "registered user" provisions of the law. The all-important requirement here is that the trademark must be registered before the registered user provisions will apply. Prior to the adoption of registered user provisions in Canada in 1954, and by Eire in 1964, licensing was not permitted in those countries, nor was licensing permitted in the Netherlands until the adoption of a new Act in 1957, nor in Japan until the advent of the new Japanese trademark law in 1960.

An attempt was made at the Lisbon Revision of the Paris Union in 1957 to introduce a licensing provision into the International Convention. Unfortunately, the proposal was vetoed by the United States, and was not adopted. Hopefully, the subject may come up again at the next Congress. If so, such a provision may be adopted. In addition, there are still countries not parties to the Paris Union which still do not permit licensing, or whose laws are silent on the subject. Hopefully, also, these countries will eventually update or amend their laws to include provisions for the licensing of trademarks.

One of the main deterrents to a large-scale trademark registration program abroad is the expense involved in obtaining separate trademark registrations in a number of countries. As we have seen, 12 of the former French colonies resolved the problem by forming a Union and providing for a single registration to cover all of the countries of the Union. However, an agreement to provide for the international registration of trademarks was formed many years earlier, in 1892, under the provisions of Article 15 of the Paris Union of 1883. Its title is the Arrangement of Madrid for the International Registration of Marks of Manufacture and Commerce. The purpose of the Arrangement is to facilitate the registration of trademarks by providing that a mark registered in one country of the Arrangement by a qualified registrant may be deposited at a central depository at Geneva as an international registration which may then become effective in the other countries of the Arrangement.

The Arrangement is open to the nationals of countries which are parties to it, as well as to anyone who has a real and effective industrial or commercial establishment in the territory of one of the contracting countries. Any country which is party to the Paris Union may join it. At the present time, it has 21 members. The Arrangement has been revised several times, the latest being the 1957 Revision of Nice, which became effective December 15, 1966. All of the member countries except Austria, Morocco, and Vietnam have now adhered to the Nice text.

The two most important changes brought about by the Nice text are first, the provision that after five years from the date of the international registration, the international registration becomes independent of the national registration upon which it is based. The second is Article 3 bis, the so-called "territorial limitation" clause, which provides that any contracting country may, at any time, notify the Swiss government that the protection resulting from an international registration shall only extend to the country if the proprietor of the mark expressly demands it, and pays an additional fee of 25 Swiss francs. So far 10 States have elected 3 bis. They include Belgium, Italy, Luxembourg, Monaco, Netherlands, Portugal, Rumania, Spain, Tunisia, and the United Arab Republic.

While the United States is not a party to the Arrangement of Madrid, many American companies which have subsidiary companies in the territory of one of the contracting countries can and do obtain international registrations in the name of the subsidiary.

A few years ago, the United States government, through the Office of International Affairs of the Patent Office, raised the question whether the United States should adhere to the Arrangement, particularly in view of the changes brought about by the Nice Revision. This question has been discussed and debated at great length by the Bar and other associations concerned with trademark matters. The consensus of opinion resulting from the deliberations of these various groups appears to be in favor of the principle of international registration of trademarks, but against United States adherence to the Arrangement of Madrid as presently constituted.

Dr. Ladas, the recipient of our award this evening, has prepared a draft of a new International Arrangement. For those of you who are interested, this draft has been published in the July 1967, issue of the *Trademark Reporter.* The Ladas draft adopts an approach similar to the Afro-Malagasy Union approach in that it provides for the direct filing of an application with an International Agency at Geneva without the necessity of first obtaining a home country registration. Meanwhile, there have been some intimations from Dr. Bodenhausen at BIRPI that he will appoint a committee to consider the matter and perhaps make some proposals at the next International Congress in Vienna in 1972. At the same time, some of our own associations, such as AIPPI, propose to continue with studies of the matter.

Another arrangement that was made at Nice in 1957 is the "Arrangement of Nice Concerning the International Classification of Goods and Services for the Purpose of the Registration of Trademarks." This Arrangement came into force on April 8, 1961, and provides for the adop-

tion of the international classification system, consisting of 34 classes for goods and eight classes for services, as well as the adoption of an alphabetical list of goods and services with an indication of the classes into which they fall.

To date, 24 countries have joined the Arrangement, including most of the countries which are parties to the Madrid Arrangement. In addition, many other countries have adopted the International Classification System without joining the Arrangement. The United States is presently giving consideration to the adoption of this system, and to possible adherence to the Arrangement itself. As a preliminary step, the United States Patent Office has been at work reviewing registrations and indicating the international class applicable for the existing U. S. class. Since March, 1968, applicants have also been asked to state in their application the international as well as the national class into which the goods in the application fall.

I hope that these few comments have made it apparent that for the past several years there has been a trend toward modernization of the trademark system. We see efforts to create uniformity in the classification system, to strive for simplicity of registration procedures and a reduction in the number of filings required, to recognize the validity of trademark licensing, to provide for the elimination of marks not in use, and permit earlier claim to trademark rights by eliminating the requirement of use prior to filing. While there is still much work to be done, it would appear, therefore, that the "Trademark Outlook" does offer an optimistic view for the future.

However, I do feel that this brief dissertation will not be complete if I do not make mention, at least, of another aspect of the "Trademark Outlook," what I might term the pessimistic view. I speak of a development of the past few years which has been described as the challenge to the trademark system. This challenge stems largely from all three branches of government and from some segments of the academic community, and while it has its roots in this country, it is also spreading to other countries of the world. It is the attitude which views trademarks in monopolistic terms, rather than as competitive tools in a competitive economy.

This challenge to the trademark system is most specific and acute in the ethical pharmaceutical industry, where for several years some legislators have been endeavoring to discourage and curtail if not actually abolish the use of trademarks in the marketing of drug products. The challenge is also implicit in the view taken by some government officials that advertising and similar promotional effort is likely to enhance the growth of monopoly in our economy, and the view that

large companies with a heavy concentration of advertising expenditures can create such a large demand for a product that competitors have difficulty penetrating such a market, and potential competitors hesitate to face the increased barrier to entry of that market.

I mentioned these developments because they are attitudes which pose a threat to the trademark system, which is of some concern to the trademark owner and the Trademark Bar, particularly since trademarks have long been considered competitive tools in a competitive economy, offering the prospective purchaser a wide choice among various brands, and enabling the manufacturer of products of good grade and good quality to obtain a competitive edge in the marketplace.

We trust that this latter view will coninue to prevail, and that the trademark will continue unhampered as the means by which the manufacturer or merchant identifies his goods and sets them apart from the goods of others, so that his integrity and reputation, and the nature and quality of this merchandise can be readily measured by the consumer. Thank you. (Applause)

MODERATOR DIAMOND: Thank you all for a very interesting series of discussions.

I hope there have been some questions written out. While they are being collected and brought up here, I would like to comment on some of the things that are in the hopper toward the modernization of the trademark system.

You have heard discussion by both Allen Brufsky and Tony DeSimone about the "intention to use" bill, which would introduce into the United States a system of filing trademark applications which would then be examined before the applicant went to the expense of putting the mark into actual use.

One of the features of that bill would be the publication as promptly as possible after filing of the basic details of the application, so that the business community at large would know at the earliest possible moment what its competitors were up to, the hope being that if somebody else was working on the same or a similar mark, there could be an informal complaint, or get-together, if necessary; and that the parties, if they were unable to settle their differences, at least would know what was happening, and would not get themselves involved in unnecessary expense while the conflict was brewing.

The idea of knowing at the earliest possible moment what is on file in the Patent Office seems to many of us to have a great deal of merit,

whether the application is based on an intention to use, or whether it is based upon actual use, and a proposal is being made by the American Bar Association committee to amend this proposed legislation to provide for the so-called "quickie" publication of all applications, so that this information will become available to the community at large.

Another serious problem that has been alluded to earlier this afternoon is the question of the common law user, who, depending on your choice of metaphor, either comes out of the bulrushes or crawls out of the woodwork—we refer to these sometimes as ambush claims.

What in the world can we do about him? The fundamental difficulty is that the whole basis of trademark law in this country is use.

The common law right is considered to be the sine qua non of any kind of legal protectability for trademarks. Registration adds certain procedural advantages, and eventually may lead to incontestability, but use is the source from which the legal right actually stems.

Can we properly cut off the rights of somebody who really has use, but just has not gotten around to register for one reason or another? This is indeed a serious problem. With the growth in communications and transportation speed these days, it is a rarity that somebody really has small local business that doesn't have impact at least across one state line, and yet, there are still some such.

Can we dare enact something that would be equivalent to a statute of limitations, which would in effect require the common law user to register, or at least to come in and oppose an application for registration by the subsequent user, at the peril of losing his rights altogether? This topic is receiving study, also by an American Bar Association committee.

Another piece of legislation which has been moving along, I am afraid it is with all deliberate speeed, or perhaps even less that that, is the proposal for a federal statute on unfair competition, which, in its current version, takes the form of a proposed amendment to Section 43 (a) of the Lanham Act. Section 43 (a), as some of you will recall, is a rather broad section which deals with misrepresentations of origin and related matters. It is somehting of an historical accident that it appears in its present position in the law, but taking advantage of the fact that it is there, the current impetus toward enacting a federal law of unfair competition is in the form of an amendment that would further Section 43 (a).

The proposal is to enumerate a series of generally recognized types of unfair competition, provide that they are actionable as federal tort, and permit the same kind of remedies to be granted for the violation

of those rights as are granted for infringement of a registered trademark. Difficulties have arisen in terms of getting an acceptable schedule of what shall be unfair competition, and particularly with what those of us who have been working on the bill feel is an absolute essential, namely, a catch-all provision. As the Supreme Court said a good many years ago—I think it was in the first case that came to the Supreme Court under the Federal Trade Commission Act—if you try to make a catalog of what is unfair, all that is going to do is encourage somebody to come along tomorrow and think up a new version, and if your statute is too specific, he will get away scot-free.

International registration has already been mentioned, and here I would like to disagree a little bit. Some of you know that I wear two hats from time to time. I have my trademark hat on this afternoon. I sometimes wear a copyright hat. In the copyright field, the United States was faced with something of a parallel problem to what it now faces in connection with international trademark registration.

A number of years ago, the conclusion was reached that certainly not in the foreseeable future would the United States be ready to join the Berne Convention of Copyright, which goes back to 1886, and which has more members than the Madrid Arrangement for trademarks, but the situation could be described as a much more serious one in the trademark area.

What happened in the copyright field was that the United States originated the idea of a whole new approach to international copyright conventions. This was sponsored through UNESCO, and became what is referred to as the UCC, the Universal Copyright Convention, to which the United States and many other countries now belong. Some day, the United States may amend its Copyright Act and may be able to join the Berne Union, as well, but since the 1950s, we have established—and this country was the prime mover in doing so—a separate new International Copyright Convention.

Perhaps that is the kind of thing we should be thinking about in the trademark field, as well. I can envision, for example, a United States company, or any company in any part of the world, which is engaged in substantial international commerce, being willing to pay a fairly substantial fee to get a single registration that would be a true international registration, and avoid the necessity of going all around the world, and spending fees in something like 200 countries. The African and Malagasy Union has been kind to us. For one fee, there, you get the equivalent of 12 registrations. Whether that approach will spread or not, I don't know.

If you look at the history of the developing countries, it seems that the first thing they do is develop a currency, and then they issue postage stamps, because they know there are collectors all over the world who will buy them, and then they open a patent and trademark registration office, because they know there are people all over the world, particularly in the United States of America, who feel they have to have a trademark registration in every country that has a registration system I hope we can find a more economical way of dealing with that some day.

Now, how about the questions? Have any been brought up? Would any body like to raise his hand, and give us a question orally, or shall I ramble on and talk some more?

Professor Harris, do I have any more time?

DIRECTOR HARRIS: Three minutes.

MODERATOR DIAMOND: I will take five.

One of the very important aspects of trademarks which also has been touched on earlier this afternoon really could be the subject for at least a whole program of its own. In his introductory remarks this morning, Professor Harris talked about the attacks on the trademark system, and he mentioned them again in introducing me this afternoon. This is an aspect of what is now known as the consumerism movement.

I think we can recognize that the message of the United States government as of 1967 and 1968 to manufacturers in this country is, "Love thy consumer." If you analyze some of the types of legislation which have been passed and proposed; some of the statements, as Professor Harris pointed out, that emanate from the Antitrust Division; some of the decisions on antitrust cases that come from the United States Supreme Court; you will detect, I think—at least I detected it and wrote about it—an attempt to denigrate trademarks.

The idea seems to be that trademarks are dangerous because people like them too much; that you shouldn't pick Colgate toothpaste because you like Colgate as a brand name.

I hate to mention cigarettes, but perhaps it is Chesterfield cigarettes you choose, and if you want to go to filters, maybe you would rather get a Chesterfield filter because you believe in whatever it is that Chesterfield has stood for to you for all these years.

Incidentally, one anecdote. In last week's issue of the *Official Gazette* of the United States Patent Office, there was published the trademark Cancer for cigarettes.

One of the things that trademarks do stand for is a certain sense of reliability and confidence on the part of the public, and this seems to

be what the government is trying to push down, in what I call the consumerism movement.

The idea is to give the consumer all the technical information that is possible about the product, so that he can go out and make an informed choice—it is generally not a he, it is a she, because that seems to be a more appealing way of putting it. We are asked to believe that the typical consumer is generally a very stupid woman who is in a supermarket and is completely befuddled because she has read the newspaper and watched television and heard the radio, and has looked in magazines, and now she has all these shelves and shelves with all these brands, and the goods inside the cans and packages are not properly described to her.

They come in different sizes and shapes, and she can't figure out which is the better buy, and she really shouldn't be paying any attention to these terrible trademarks on the packages, which may be the way in which she has been used to buying these things. Instead, she ought to be technically informed as a consumer, but she should not have to carry a slide rule, she should be able to make immediate comparisons about how many cents an ounce or dollars a pound, or whatever it happens to be, is the price of what is in the package. Undoubtedly there is a middle ground here somewhere. I think the pendulum is swinging too far, and those of us who are concerned with trademarks want to bring this to the attention of everyone in the country.

You have heard some of the results of the Institute's research into the economic importance of trademarks. This so-called consumerism movement would tend to cut that down, if not eliminate it altogether.

If there are no further questions, I want to thank you all very much.

(Applause)

DIRECTOR HARRIS: Thank you, gentlemen.

SECOND SESSION

Toward the Accommodation to Modernization: Interplay of Unfair Competition and Antitrust Doctrines

DIRECTOR L. JAMES HARRIS: The Moderator-Commentator of the Second Session of this Conference is so well known to all of you, for his scholarship and his teaching over the years, that any introduction would be superfluous. He was the winner of the first Kettering Award; and he concluded his Kettering Address with prophetic words most relevant to the subject under discussion this afternoon: "It may be anticipated that, as this Foundation [we were then known as a Foundation] moves into the area of research in the system here designated as unfair competition law, it will initiate pilot studies in this field comparable to those it has undertaken under the patent system and is likewise planning to do under the copyright system. This is the Foundation's program for enlightenment on the relation of all of these systems to industrial and social progress."

It gives me great pleasure to introduce our Adviser on Research, Professor S. Chesterfield Oppenheim, or as he is known to his myriad students and admirers—"Oppie."

MODERATOR-COMMENTATOR OPPENHEIM: This is no reference to Mohammed and the mountain. Since I can't get up to the mike, it has to come down to me.

The topic, as you know, is the "Interplay of Unfair Competition and Antitrust Doctrines." Unfair competition and restraint of trade doctrines are deeply rooted in the English common law. From these origins, two interrelated bodies of law have evolved in the United States.

One body reflects the policy of preserving the discipline of competition as the prime generator of private enterprise by prohibiting unreasonable restraints of trade and monopolization. This is now generically known as the antitrust laws.

The other part mirrors the policy of insuring fairness in commercial rivalry by banning unfair trade practices and to cover situations where the parties are non-competitors.

This afternoon we are using the term "unfair competition," but I hope you will bear in mind it may also cover non-competitor situations. These two areas of legal doctrine for the most part co-exist without conflict in their common goals. Each one generally moves within its appointed orbit, but the two are not invariably mutually exclusive. When they overlap, their policy goals may be either compatible or unharmonious.

This panel discussion is limited to constructing a sampling of a framework of analysis of the interplay of these two bodies of law only when they raise legal issues regarding prevention of unfair trading and prohibitions upon unreasonable restraints of trade and monoply in a manner that creates conflict or clash, or perhaps lending themselves to accommodation without sacrifice of the objectives each is designed to preserve.

It took centuries to develop the concept that freedom to trade is an inalienable mode of earning a livelihood and acquiring the status of affluence. The foundation stone of the privilege to engage in a private business, and to compete for customers was laid in 1415 in the *Schoolmasters* case arising in an English common law court.

Two masters of a grammar school claiming an exclusive franchise sued the defendant, who had the brashness to open a competitive school in the same locality. The plaintiff felt aggrieved, because the school diverted students, and did so by cutting student fees. The court held there was no cause of action against the defendant discount schoolhouse. From then on, competition became a legal justification for conduct previously regarded as wrongful.

Lawyers know that every relational interest between competitors or non-competitors may involve disputes which the courts of common law and equity seek to resolve through the judicial process of the law of torts. A tort is a civil wrong.

In trade and commerce, the cardinal legal question of whether or not there is a business wrong is this: Is the challenged conduct privileged, or does it exceed the bounds of privilege by inflicting injury unjustified by any countervailing economic or social policy value?

A mass of litigation has committed that issue to judges and juries for generations, but if one cuts through the legal technicalities and doctrinal involvements, concepts emerge and endure to this day in the interplay of unfair competition and restraint of trade doctrines.

One concept is that business that is lost to a rival by fair competition is a privileged interference for which the law offers no redress. This, to borrow a phrase from my colleagues, Louis Harris and Irving Siegel, is positive competition. It is constructive, and hence not a business wrong.

Conversely, diversion of business from a competitor or a non-competitor is disruptive and is a business wrong if it results from misrepresentation practices, appropriates values equitably belonging to another, or includes a species of competition one isn't legally entitled to introduce into the market. This is unprivileged. It may consist of reaping the fruits of what another has created, or it may constitute an illegal restraint of trade, or an assertion of monopoly exclusiveness not within the allowable area of patents, copyrights, and exclusive franchises in the public utility field.

Erected upon this common historic common law of torts and trade is the American statutory structure. Some parts are relevant to the protection of industrial and intellectual interests. Other parts are directed toward suppression of competition or controlling the excesses of unfair trade.

In the federal field, the patent and copyright laws are designed to safeguard the innovations of inventors and authors, as the Constitutional provision contemplates.

The Trademark Act of 1946 seeks to implement and expand the protection of trade identity symbols. The Sherman, Clayton, and Federal Trade Commission Acts are the major antitrust laws which are aimed at preventing foreclosure of competition.

The Federal Trade Commission has a dual authority, to attack illegal restraints of trade, and to declare illegal unfair methods of

competition and unfair or deceptive acts or practices. Any kind of unfair competition or unfair trading may be an element of antitrust violation.

With this brief overview in mind, this afternoon's session was planned to present, as I have said, only a sample of three areas of American jurisprudence, where recent litigation in private and public suits has brought into focus actual and potential conflicts between the policy of providing legal remedies against unfair trade practices and the policy of prohibiting unlawful restraints of trade and monopolistic exclusion of competition. I shall describe each of these respective areas as I introduce our panel speakers, to whom we have assigned a particular topic for discussion.

In these prefatory comments, I merely emphasize that we ask the panelists to present an analysis which will contribute to a rationale for reconciling unfair competition and antitrust doctrines when they come into actual or apparent conflict.

On the one hand, the public interest requires preservation of the legitimate rights of persons who invest their talents and their money in creations of legal substance and monetary value.

On the other hand, the same public interest requires prohibitions upon the misuse and antitrust abuse of the acquired rights, but without permitting such prohibitions unduly to dilute private incentive.

Now it is my privilege to turn to the speakers on this occasion. I may say that each one of them was advised that his oral presentation can be condensed, but that the entire paper will be published in full in *IDEA*, with the footnote annotations. This will reach, as you know, a larger audience.

Our first speaker has been asked to discuss the interaction of unfair competition and antitrust doctrines in the exercise of the Federal Trade Commission's jurisdiction under Section 5 of the Federal Trade Commission Act. This will give us an overview of this important sector of public law.

Edward F. Howrey has had a distinguished career in both government service and private practice as a specialist in the antitrust and trade regulation fields. He received his Bachelor's degree from the University of Iowa and his law degree from George Washington University.

From 1927 to 1929 he was an attorney in the United States Department of Justice, and after years of private practice, he was appointed in 1953 by President Eisenhower to be the Chairman of the

Federal Trade Commission. During his incumbency in that important post, he made many notable improvements in the Commission's internal administrative setup and procedures. This led commentators to refer to that agency in aptly descriptive terms as the "new Federal Trade Commission."

Since 1955, he has been a senior partner of Howrey, Simon, Baker and Murchison in this city. He is a Fellow of the American College of Trial Lawyers, and a Fellow of the American Bar Foundation.

For me, this is much more than a formal introduction. It has been my privilege to be associated with Mr. Howrey for many decades in the fields of our mutual interest in antitrust and trade regulation law.

I present to you the Honorable Edward F. Howrey.

Jack. (Applause)

Interplay of Unfair Competition and Antitrust Doctrines Under Section 5 of the Federal Trade Commission Act

EDWARD F. HOWREY

The jurisdiction of the Federal Trade Commission stems in preponderant part from Section 5 of the Federal Trade Commission Act and the provisions of the Clayton Act.

Section 5 outlaws unfair methods of competition and unfair or deceptive acts or practices in interstate commerce. The Commission has concurrent jurisdiction with the Department of Justice to enforce the Clayton Act, although the Robinson-Patman Act amendment to Section 2 of that Act prohibiting price and service discriminations has been enforced almost entirely by the Commission. Section 3 of the Clayton Act bars exclusive arrangements and tying clauses, and Section 7 deals with mergers.[1] Both provisions apply only upon proof of a

[1] For a survey of the case law in these two fields, see Oppenheim & Weston, *Federal Antitrust Laws: Cases and Comments* (3d ed. 1968); Oppenheim, *Unfair Trade Practices: Cases and Comments* (2d ed. 1965); Callmann, *The Law of Unfair Competition, Trademarks, and Monopolies* (3d ed. 1967-1968).

reasonable probability of a substantial lessening of competition or a tendency toward monopoly.

This paper is limited to an analysis of the interplay of unfair competition and antitrust doctrines arising from the expanding utilization in recent years of Section 5 of the Federal Trade Commission Act into novel areas of attack. This has raised issues of the scope of Section 5 as a means of enforcement of Sherman Act violations and as a means of challenging conduct governed by the specific provisions of the Clayton Act.

Section 5 is the fountainhead from which two bodies of Commission decisions have stemmed. One is generally characterized as unfair competition or unfair trade practice law. The other is described as restraints of trade or antitrust law.

These two sets of doctrines are not completely separable. Practices condemned as unfair competition may be an element of a course of conduct in violation of the antitrust laws. Generally speaking, the prohibitions upon unfair competition are aimed at creating conditions which foster fairness in competitive rivalry, whereas the antitrust proscriptions are principally directed toward removing unreasonable or monopolistic obstructions to the freedom to compete. The findings of fact of the Commission, if supported by substantial evidence, are conclusive on judicial review. But the courts have the final say as to whether the challenged conduct, as a matter of law, constitutes an unfair method of competition or a deceptive or unfair act or practice.

In the unfair competition sector Section 5 of the Federal Trade Commission Act has been applied to develop a massive attack upon false and misleading advertising. The 1938 Wheeler-Lea Amendment to Section 5 removed an earlier restriction which required the Commission to prove injury to competition as well as an unfair method. From then on the Commission has had the power to enjoin deceptive or unfair acts which per se mislead consumers without the need for proving diversion of trade from a competitor.

Even before the Wheeler-Lea Amendment, the Supreme Court in the milestone opinion of Justice Stone in *FTC* v. *R.F. Keppel & Bros.*[2] converted Section 5 into a flexible and expansive provision far beyond the narrow confines of common law unfair competition which was aimed at preventing infringement of trademarks and tradenames by passing off one's goods as coming from another identified source.

By a gradual case-by-case process of judicial inclusion and exclusion, the Commission's intervention against unfair competition encompasses

[2] 291 U.S. 304 (1934).

many practices other than misrepresentations, such as inducing breach of contract, disparagement of competitors' products and business methods, appropriation of trade values such as trade secrets and the like.

Turning to the second body of federal or national law developed by the Federal Trade Commission within the orbit of antitrust prohibitions, the Supreme Court has ruled that the Commission, in addition to its jurisdiction to enforce the Clayton Act, may resort to Section 5 of the Federal Trade Commission Act to attack both consummated and incipient Sherman Act violations.[3] In *FTC* v. *Cement Institute*,[4] the Supreme Court stated that Section 5 gave the Commission power to "hit at every trade practice, then existing or thereafter contrived, which restrained competition or might lead to such restraint if not stopped in its incipient stages."

Other broad dicta referred to the relation of Section 5 to both the Sherman and Clayton Acts. In the 1941 *Fashion Originators' Guild* case[5] the Court declared that if the defendant's "purpose and practice . . . runs counter to the public policy declared in the Sherman and Clayton Acts, the Federal Trade Commission has the power to suppress it as an unfair method of competition." In the 1953 *Motion Picture Advertising Service* case,[6] the Supreme Court reaffirmed this interlocking of the Sherman and Clayton Acts. The Court sustained a Section 5 order prohibiting contracts granting exclusive exhibition rights of advertising films. While holding this a violation of the Sherman Act, the Court announced a dictum of wide scope in the following language:

> It is also clear that the Federal Trade Commission Act was designed to supplement and bolster the Sherman Act and the Clayton Act... to stop in their incipiency acts and practices which, when full blown, would violate those Acts . . . as well as to condemn as "unfair methods of competition" existing violations of them. . . .[7]

In his dissenting opinion, Justice Frankfurter, while agreeing that Section 5 may be used to interdict incipient Sherman and Clayton Act violations, nevertheless warned that the Commission's authority to outlaw incipient transgressions did not permit the Commission to

---

[3] For analysis of decisions in this area as of 1960, see Howrey, "Utilization by the FTC of Section 5 of the Federal Trade Commission Act as an Antitrust Law," *Antitrust Bulletin*, Vol. 5 (1960), p. 161.

[4] 333 U.S. 683, 693 (1948).

[5] Fashion Originators' Guild v. FTC, 312 U.S. 457, 463 (1941).

[6] FTC v. Motion Picture Advertising Service Co., 344 U.S. 392 (1953); see also discussion of FTC v. Brown Shoe Co., *infra*.

[7] 344 U.S. at 394-395.

embark upon "unbridled intervention into business practices."[8]

Bearing in mind that Section 3 of the Clayton Act bars exclusive arrangements and tying devices, and Section 7 of that Act prohibits mergers which are only reasonably likely to lessen competition substantially or tend to create a monopoly, it is evident that the Commission's jurisdiction under Section 5 to nip in the bud incipient Clayton Act violations may, if unchecked, reach the extreme of an "incipient incipiency" doctrine.

As a consequence, Section 5 cases have resulted in orders against both full-blown and incipient Sherman Act offenses. Such offenses may fall within the illegal per se Sherman Act violations or may be determined by an extended Rule of Reason examination of all relevant facts and factors as indicated in the celebrated opinion of Justice Brandeis in the *Chicago Board of Trade* case.[9] This interplay of Section 5 and the Sherman Act may involve a clash of unfair competition and antitrust doctrines.

Ill considered extensions of the illegal per se categories of Sherman Act violations beyond the present condemnation of horizontal agreements among competitors to fix market prices, to divide markets, and to boycott others may stifle rather than promote lawful trading advantages and competitive endeavors. This is especially pertinent to the use of Section 5 of the Federal Trade Commission Act to attack incipient and vague Sherman Act violations. The warning of the Supreme Court as far back as 1923 in the *Sinclair Refining* case[10] bears repeating today. The Court there stated that the Commission

> . . . has no general authority to compel competitors to a common level, to interfere with ordinary business methods or to prescribe arbitrary standards for those engaged in the conflict for advantage called competition.

There is thus a vast difference between the prohibitions of unfair competition and unreasonable restraints of trade and the use of Section 5 as an instrumentality for prescribing and regulating the limits of lawful conduct.

Interplay of Section 5 and the Clayton Act Prohibitions

One area of this interplay is illustrated in the controversial issues

---

[8] *Id.* at 405.

[9] Board of Trade of the City of Chicago v. United States, 246 U.S. 231 (1918).

[10] FTC v. Sinclair Refining Co., 261 U.S. 463, 475-476 (1923).

presented by the Commission's resort to Section 5 to challenge practices which do not meet the specific jurisdictional requirements of the Clayton Act.

Grand Union Co. v. *FTC*[11] is the first court of appeals decision upholding the utilization of Section 5 to ban a discriminatory practice in violation of Section 2(d) of the Robinson-Patman amendment to the Clayton Act.

The apparent conflict in this ruling arose from the following situation. Section 2(d)'s specific provision makes only a *seller* liable for granting advertising allowances to a buyer which are not made available by the seller on proportionally equal terms to other customers competing with the buyer. Proceeding under Section 5 the Commission charged Grand Union as a *buyer* with knowingly inducing and receiving from various sellers advertising allowances not paid on equal terms to other purchasers.

The court held that notwithstanding the fact that Section 2 (d) does not mention buyers, Grand Union had violated the underlying policy of the Clayton Act. The court approved the Commission's claim that Section 5 was intended to bolster other antitrust statutes by outlawing conduct which violated their "spirit" as well as letter.

In effect, this ruling applies the Supreme Court dicta in the *Cement* and *Motion Picture Advertising* cases, previously mentioned, by expanding Section 5 to prohibit a discriminatory practice akin to a Robinson-Patman violation. Furthermore, the court held that the discrimination was illegal per se, citing for comparison the Supreme Court decision in *FTC* v. *Simplicity Pattern Co.*,[12] which arose directly under the Robinson-Patman Act and by decision and dicta held both Sections 2 (d) and 2 (e), both covering promotional allowances, per se types of prohibitions. These provisions relieve the Commission of the burden of proving injury to competition as an element of a Section 5 violation, whereas Section 2 (a) of the Robinson-Patman Act dealing with price discrimination does require proof of injurious effects on competition.

Grand Union strangely coalesces the concept of unfair discriminatory promotional allowances with a per se antitrust rule. This brushes aside a conflict between Section 5's general standards and the specific provisions of the Robinson-Patman Act deliberately formulated by the Congress to counteract the catch-all vagueness of the phrases "unfair

[11] 300 F.2d 92 (2d Cir. 1962); see also American News Co. v. FTC, 300 F.2d 104 (2d Cir. 1962), *cert. denied,* 371 U.S. 824 (1962); Giant Food Inc. v. FTC, 307 F.2d 184 (D.C. Cir. 1962), *cert. denied,* 372 U.S. 910 (1963).

[12] 360 U.S. 55 (1959).

methods of competition" and "unfair acts or practices."

In his dissenting opinion in *Grand Union,* Judge Moore concluded that the majority in effect held that:

> . . . the Federal Trade Commission can arrogate to itself the legislative powers of Congress whenever there appears a field which Congress has not covered but which the Commission believes should be covered by legislation of its own making.[13]

The Supreme Court has not finally determined this precise issue. However, in its *Simplicity Pattern* opinion, the Court declared that neither the Commission nor the courts should attempt to "supply what Congress has studiously omitted."[14] The breadth of the Commission's jurisdiction under Section 5 must be conceded, but the convenient generality of that provision cannot justify imputing to Congress an intention to give the Commission a boundless blank check to fill in gaps left in the Clayton Act's particularized provisions. The legislative history shows that after enacting Section 5, the Congress proceeded to restrict its scope by prohibitions upon practices it deemed to require greater specification. In 1936 the Robinson-Patman Act was enacted to the same end with respect to discriminations in price and services. It is hoped the Commission will not regard *Grand Union* as an open invitation to by-pass the requirements of the Robinson-Patman Act by using Section 5 to prohibit what that statute does not prohibit or to foreclose what it permits.

Pertinent to the concern which has been expressed regarding the rationale of *Grand Union* is the Supreme Court's pronouncement in *Automatic Canteen Co.* v. *FTC*[15] that it is the duty of the Court to reconcile the text of the Robinson-Patman Act "with the broader antitrust policies that have been laid down by Congress," referring particularly to the Sherman Act.

Equally worthy of note are two early decisions of the Supreme Court in which the Commission charged both violation of Section 5 and Section 3 of the Clayton Act. In *FTC* v. *Curtis Publishing Co.,*[16] the Supreme Court reversed a Commission order banning the use by Curtis of exclusive dealing contracts in distributing its publications through agents. Absent a showing of detrimental effect on competition, the Court concluded that the agency contracts were made "without unlawful motive and in the orderly course of an expanding busi-

---

[13] 300 F.2d at 101.
[14] 360 U.S. at 67.
[15] 346 U.S. 61, 74 (1953).
[16] 260 U.S. 568 (1923).

ness,"[17] and hence not in violation of either Section 3 of the Clayton Act or Section 5 of the FTC Act.

Likewise, in *FTC* v. *Sinclair Refining Co.*,[18] the Supreme Court nullified Commission orders prohibiting a gasoline supplier from providing storage tanks and pumps to lessees on the condition that only Sinclair gasoline be used with such equipment. There was no prohibition upon the lessee's right to use competitive products and hence no violation of Section 3 of the Clayton Act. Moreover, no violation of Section 5 was established since there was no purpose or power to acquire unlawful monopoly power and no probable effect of unduly lessening competition. It was also clear that to permit dispensing another brand of gasoline from Sinclair-marked pumps would be a deceptive practice infringing the good will of the Sinclair brand.

The *Curtis* and *Sinclair* decisions, in my opinion, are classic examples of a proper accommodation of the public interest in the promotion of fair competition and avoidance of a misapplication of antitrust standards.

The recent Supreme Court decision in *FTC* v. *Brown Shoe Co.*,[19] however, stresses the breadth of the Commission's discretionary authority under Section 5. Brown Shoe Company franchised independent retail outlets, and in return for certain valuable services the retailer promised to concentrate his business within the grade and price lines of Brown Shoe and to handle no conflicting line of shoes. The Commission concluded that this "franchise store" program was an unfair method of competition prohibited by Section 5. The court of appeals interpreted the Commission's order as an attack on agreements permitted under Section 3 of the Clayton Act which proscribes exclusive dealing and tying clauses only when they may substantially lessen competition or tend to create a monopoly.

But a unanimous Supreme Court affirmed the Commission's order. The Court, applying previous dicta, concluded that

> . . . the Commission has power under §5 to arrest trade restraints in their incipiency without proof that they amount to an outright violation of §3 of the Clayton Act or other provisions of the antitrust laws.[20]

Actually the Commission found that the program induced franchise stores to purchase 75 percent of their total shoe requirements from Brown and that this had the effect of foreclosing the market to

---

[17] *Id. at* 582.
[18] 261 U.S. 463 (1923).
[19] 384 U.S. 316 (1966).
[20] *Id.* at 322.

Brown's competitors. But the Court plainly stated that Section 5 can ban an unfair practice in the absence of proof of probable adverse competitive effects. Hence, this is another example of use of Section 5 to strike down a Clayton Act Section 3 type of violation without proof of the anticompetitive effects specifically required under that section. *Brown Shoe,* like *Grand Union,* in effect gives the Commission a quasi-legislative power to extend Section 5 beyond the test of violation Congress particularized in Section 3. The incipiency of incipient restraints is thus compounded.

Use of Section 5 to Attack Economic Power

In *Atlantic Refining Co.* v. *FTC,*[21] the Supreme Court affirmed an FTC order under Section 5 prohibiting a sales commission arrangement between Atlantic and Goodyear Tire & Rubber Company under which the oil company sponsored Goodyear's line of tires, batteries, and accessories (known as TBA) in return for a percentage commission from the tire company. The tire company established the TBA prices, assumed distribution costs, and conducted joint sales promotion with the oil company. The latter agreed to promote sales of Goodyear TBA items to its service station dealers and to assist in their resale.

The Supreme Court noted that the Commission in prohibiting both Atlantic and Goodyear from participating in any such commission arrangements "considered the coercive practices to be symptomatic of a more fundamental restraint of trade and found the sales-commission plan illegal in itself as 'a classic example of the use of economic power in one market . . . to destroy competition in another market. . . .' "[22]

Reiterating the broad power of the Commission to determine whether a method of competition complained of is unfair, the Court agreed that there is "warrant in the record" for the Commission's findings. Atlantic and its dealers did not bargain as equals, the Court said, for Atlantic possessed a number of sources of economic leverage. The Court pointed out that "there was abundant evidence that Atlantic, in some instances with the aid of Goodyear, not only exerted the persuasion that is a natural incident of its economic power, but coupled with it direct and overt threats of reprisal . . ." in other words, that there was a "bundle of persuasion."[23]

---

[21] 381 U.S. 357 (1965).
[22] *Id.* at 361.
[23] *Id.* at 368.

Moving on to a determination of whether there was a "reasonable basis in law" for the Commission's conclusion that the arrangement constituted an unfair method of competition, the Court recognized that the plan was not an actual tying arrangement but rather had the "central competitive characteristics" of one, namely "the utilization of economic power in one market to curtail competition in another," pointing out that in this case the "lever was bolstered by actual threats and coercive practices."[24] The Court then stated that "all that is necessary in §5 proceedings to find a violation is to discover conduct that 'runs counter to the public policy declared in the Act' " and that "[w]hen conduct does bear the characteristics of recognized antitrust violations it becomes suspect, and the Commission may properly look to cases applying those laws for guidance."[25]

The Court noted that the Commission looked to the entire record as a basis for its conclusion of impairment of competition. The Court also noted that the Commission's findings of foreclosure of competing brands and of exclusive territories were effects on competition which flowed from the contract itself. The Commission's finding of foreclosure of Atlantic wholesalers and retailers from selling brands other than Goodyear was deemed to be quite a broad restraint. The Court concluded: "Thus the Commission was warranted in finding that the effect of the plan was *as though* Atlantic had agreed with Goodyear to require its dealers to buy Goodyear products and had done so" (emphasis in the original).[26] The Court further concluded:

> The short of it is that Atlantic, with Goodyear's encouragement and assistance, has marshaled its full economic power in a continuing campaign to force its dealers and wholesalers to buy Goodyear products. The anticompetitive effects of this program are clear on the record and render unnecessary extensive economic analysis of market percentages or business justifications in determining whether this was a method of competition which Congress has declared unfair and therefore unlawful.[27]

Not content with its expansive victory in *Atlantic Refining,* the Commission has carried to the Supreme Court another case concerned with the legality under Section 5 of a sales commission arrangement between a major oil company and a leading producer of tires, batteries, and accessories. In that case, *Texaco-Goodrich,*[28] the court of

---

[24] *Id.* at 369.

[25] *Id.* at 369-370.

[26] *Id.* at 370.

[27] *Id.* at 371.

[28] Texaco, Inc. v. FTC, 383 F.2d 942 (D.C. Cir. 1967), *cert. granted,* 390 U.S. 979 (1968); see also Shell Oil Co. v. FTC, 360 F.2d 470 (5th Cir. 1966), *cert. denied,* 385 U.S. 1002 (1967).

appeals reversed the Commission's holding that the Texaco-Goodrich sales commission plan constitutes an unfair method of competition since, in the court's view, two of the three essential components established by the Supreme Court's *Atlantic Refining* decision for a sales commission agreement to be illegal are missing. While finding the presence of the first element, "the oil company's dominant economic power over its dealers," the court, noting a different set of facts between the *Atlantic Refining* case and this case, did not find "exercise of that power over its dealers" or "anticompetitive effects of using that power." The court declared: "We can glean nothing from the utterances of the Supreme Court which alters the basic rule that a finding of coercion is the threshold requirement of a determination of exercise of dominant economic power."[29]

The Commission now argues that the use of coercion is not an essential factor to make a sales commission plan illegal, that the unlawful effects on competition flow from the sales commission agreement itself. The basic evil of the sales commission plan, the Commission contends, as in *Atlantic Refining,* is the use of the oil company's economic power, not the particular means, whether or not called coercion, by which it is exercised, and not the company's going beyond the promotional activities specified in the sales commission arrangement. Relying on its right to draw upon its experience and expertise and on its broad discretion to define unfair methods of competition, the Commission argues that the mere exercise of economic power is an unfair method of competition under Section 5. With respect to the court's finding of absence of anticompetitive effects, the Commission appears to claim authority to deal with incipient violations under Section 5 to the utmost by taking the position that the "[identification of] a significant tendency toward the same anticompetitive effect which had been the principal basis for condemning similar sales commission arrangements"[30] is sufficient. The Commission argues that it is "not obliged to await the development of the identifiable foreclosure into a 'full-blown' restraint"[31] before finding an unfair method of competition.

---

[29] 383 F.2d at 946.
[30] FTC v. Texaco, Inc., Petition for a Writ of Certiorari, filed January 25, 1968, p. 18.
[31] *Ibid.*

TRADEMARK LICENSE RESTRICTIONS IN FRANCHISES AND SECTION 5 OF THE FTC ACT—THE *CARVEL* CASE

Franchising as a method of distribution has blossomed into an annual billions of dollars volume. In a number of recent private suits, and in a Section 5 FTC proceeding in *Carvel Corporation*,[32] franchise restrictions designed to protect the integrity of a trademark and to preserve good will of the business were sustained. Adhering to the subject of this paper, my discussion is limited to the FTC *Carvel* case.

In pertinent part, Carvel's franchise agreements licensed retail outlets to use the "Carvel" mark in dispensing soft ice cream, the primary product sold on the premises. The franchised dealer was required to purchase from Carvel or suppliers designated by Carvel his entire requirements of the ice cream mix used in making the soft ice cream. In addition, the dealer was also required to buy from Carvel, or Carvel designated sources, his entire requirements of flavors, ingredients, and cones. All of the required purchases are items constituting a part of the end product sold to the consuming public.

The Commission's Hearing Examiner held that the Carvel franchise agreements were illegal tying arrangements. The Commission reversed, ruling that the restrictions are reasonable restraints ancillary to the main purpose of lawful contracts. The Carvel franchises were therefore held not vulnerable under the Sherman Act and free from elements of unfairness subject to Section 5 of the FTC Act and tying clause illegality under Section 3 of the Clayton Act.

Carvel is a shining example of a sound accommodation which balances the lawful claims of protection of the identity of a trademark against unsupported contentions that the franchise restrictions violate the antitrust laws.

Commissioner Mary Gardiner Jones' opinion for the Commission reveals a perceptive analysis of the nature and extent of a trademark owner's interest in protecting the good will of his mark and its association with an entire retail business outlet.

At the outset the Commission's opinion emphasizes that trademark licensing has been permitted beyond the traditional theory that the goods must emanate from the same source. Under present trademark law, the owner of the mark may license others to use it. But he must then retain sufficient control over the licensee's dealings in the end product in order to guarantee that the licensee will use the mark on the same product or on one of substantially the same quality associated

---

[32] FTC Docket 8574 (1965).

by the public with the mark.

The following quotations from the opinion spell out the highlights of the Commission's reasoning.

> Carvel's franchise agreements cannot be regarded as tie-in arrangements because the trademark license conceptually cannot constitute a "tying" product and, even if it could, it could never be regarded as a separable "product" apart from the mix and commissary items to which it is attached within the meaning of the typical tie-in arrangement. . .[33]
>
> It seems clear that since no property right inheres in a trademark apart from the product or service to which it relates, and since trademarks may be licensed but only on condition that the trademark owner retains control over the licensee's use of the trademark, it is conceptually impossible, in our opinion, to view a license to use a trademark as separate and distinct from the sale of the trademarked product or its ingredient. The Carvel franchise served the single purpose of permitting the dealer to sell the trademarked products as trademarked, and the sale to the licensee of the mix and other products cannot really be separated from the license. Both were necessary in combination to permit the dealer to exercise fully the license.
>
> Moreover, tie-in arrangements must involve two separable and distinct products and have been held not to exist where the courts concluded that the two products could not be disassociated from each other. . . . Since Carvel's franchise for the sale of Carvel products and its license to use are part of a single package, we conclude that the examiner erred in holding that the Carvel franchise agreements were illegal tie-in arrangements.[34]
>
> Complaint counsel's argument, accepted by the hearing examiner, was that Carvel's restrictions on the dealer's sources for mix and other items were unreasonable because Carvel could have achieved the same objective of quality control by prescribing specifications for the production of its mix rather than requiring that the mix be purchased from specified approved sources. . . .
>
> The evidence of record indicates that Carvel did in fact furnish both its secret formula and specifications to the approved suppliers. Respondents, however, introduced testimony that the mix could not have been adequately controlled unless Carvel restricted the sources from which it could be purchased. No counter evidence was offered by complaint counsel. . . . Moreover, there is nothing in this record which establishes even a likelihood or possibility that Carvel could have achieved the same uniformity of quality if it had broadened its list of approved suppliers of its mix.[35]

---

[33] Commission Opinion, p. 7.

[34] *Id.* at pp. 9-10.

[35] *Id.* at pp. 13-15.

The trademark cases make it clear that the licensor of a mark is required to carry out inspections to see to it that its licensees are not deceiving the public by providing them with something other than that which the trademark embodies. Failure to do so may result in such misuse of the trademark that it could be considered abandoned. It is, therefore, apparent that the threats of cancellation and

The *Carvel* rationale of the Commission is commendable. It reveals awareness of the benefits of franchising small businesses. It does not prohibit the owner of valuable trademarks from placing restrictions on franchise licensees reasonably related to the owner's right—and indeed, obligation—to control the quality of his mark and the identity or image of that trade symbol.

A few words of caution, however, should be added. The *Carvel* opinion of the Commission recognizes that trademark license restrictions are not entirely immune from attack under the antitrust laws. *Timken Roller Bearing Co.* v. *United States*[36] is cited by the Commission to warn that if the primary purpose of the license restrictions is to impose unreasonable restraints of trade, this will constitute a misuse of the mark as a device to violate the Sherman Act. This may comprehend violation of Section 3 of the Clayton Act and Section 5 of the FTC Act. The Trademark Act of 1946 also bars the use of a mark to violate the federal antitrust laws.

Rufus E. Wilson, Chief of the FTC Division of General Trade Restraints, in a recent address[37] cautioned that the Commission's application of the ancillary restraints doctrine in *Carvel* still requires the weighing of the following: (1) Does the agreement have a lawful main purpose? (2) Is the exclusive arrangement justified by business necessity? and (3) Are there actual or potential substantial anticompetitive effects on interstate commerce resulting from the exclusive buying restrictions? Mr. Wilson characterized the foregoing questions as "gray areas" of the *Carvel* decision.

Section 5 Orders in Patent Cases

Recently the Commission has successfully asserted Section 5 jurisdiction in patent cases.

In *American Cyanamid Co.* v. *FTC*,[38] the court of appeals held that a patent obtained by misrepresentation and improper conduct in

---

legal action and the conducting of repeated inspections where violations had been detected were utilized for the purpose of preventing the deterioration of the Carvel trademark. Such actions were not "harassment and intimidation" for some invidious purpose, but rather the legitimate policing of the licensees by a licensor desirous of protecting his trademark. (Commission Opinion, p. 22.)

[36] 341 U.S. 593 (1951).

[37] "How to Control the Purchases of Franchisees," address before the Franchise and Antitrust Symposium sponsored by the International Franchise Association, Washington, D. C., May 3, 1968.

[38] 363 F.2d 757 (6th Cir. 1966).

Patent Office proceedings and subsequently used to exclude competition was an unfair method of competition under Section 5 of the FTC Act. Citing the Supreme Court decision in *Walker Process*[39] the court noted that a patent procured by fraud may violate Section 2 of the Sherman Act and the FTC Act "may be construed *in pari materia* with the Sherman and Clayton Acts."[40] Compulsory licensing of the patents in issue was held to be a permissible remedy against patent misuse in any antitrust case.

Due to the disqualification of Chairman Dixon, the court remanded the case to the Commission, which again found improper procurement of the patent and ordered compulsory licensing on a 2½ percent royalty basis.[41] Commissioner Jones dissented from the part of the order allowing Cyanamid to collect royalties on patents found to be improperly obtained.

The Commission was also successful in resorting to Section 5 to attack discriminatory rental rates on leased patented machines. In *La Peyre* v. *FTC*,[42] the court of appeals sustained the Commission's holding that the respondents had violated Section 5 by charging Northwest Shrimp Canners a substantially higher rental rate on the leased patented machines than was charged to Gulf Coast Canners. The court of appeals held that there was abundant evidence to support the Commission's conclusion that this leasing practice was innately discriminatory and substantially injured competition in the shrimp canning industry.

Unfair Competition Charges in a Section 5 Monopolization Case

In the *L. G. Balfour Company*[43] case the Commission in its complaint charged the respondents with having engaged in various unfair methods of competition and unfair acts and practices in violation of Section 5. In several of the charges the respondents were accused of monopolization of the sale and distribution of fraternity insignia jewelry and of monopolization and attempted monoplization of commercial jewelry, college and class rings, and fraternity equipment and insignia-bearing products. The complaint then charged that

---

[39] Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp., 382 U.S. 172 (1965).

[40] 363 F.2d at 770.

[41] American Cyanamid Co., FTC Dkt. 7211 (1967).

[42] 366 F.2d 117 (5th Cir. 1966).

[43] FTC Dkt. 8435.

these acts and practices have had and now have, among other things, the tendency and capacity unlawfully to restain, lessen, and eliminate competition and to create a monopoly and have resulted in and continue to result in monopolization within the intent and meaning of Section 5.

This is one of the few cases brought by the Commission under Section 5 containing significant monopolization charges. The respondents, in addition to denying the existence of evidence to support the charges, and denying the unreasonableness of the practices attacked, dispute the Commission's selection of the relevant product market and also dispute other Commission contentions essential to support monopolization charges, such as market share. As to the alleged exclusive dealing arrangements with fraternities, the respondents have contended that the fraternities have the right and obligation to control and protect their trademarked insignia by means of these arrangements, particularly since, as a practical matter, the fraternities cannot manufacture jewelry or other products bearing their common law or registered trademarks and therefore must license responsible manufacturers such as respondents. The respondents further contend that the Commission's attack upon these arrangements ignores the justifiable and legitimate rights, desires, and needs of respondents' fraternity customers to protect their trademarks by licensing the most reliable and efficient manufacturer available. The respondents also contend that an accumulation of trademark licenses, just like patent licenses or copyright licenses, does not amount to monopolization or any other violation of antitrust policies.

The respondents contend that the Commission's position in this case is in conflict with the true objectives of the antitrust laws; that in its effort to assure unauthorized sales of trademarked fraternity insignia products by manufacturers and distributors who, unlicensed by the fraternities, are thus themselves engaging in unfair competition, the Commission has misconstrued the purpose of Section 5.

Another basic contention of the respondents is that Section 5, like the antitrust laws, is not intended to compel buyer-seller relationships, to prevent a buyer from doing business with a seller of his choice, or to assure some competitors of business they could not attract on their own competitive merits. On the contrary, the function of Section 5, the respondents believe, is to remove artificial and unreasonable barriers to free competition so that buyers may freely choose their sources of supply and so that sellers may compete for their patronage.

These are some of the basic contentions set forth in this novel case.

Since the case is still pending before the Commission and since I am counsel for the respondents, I shall understandably, refrain from any comments on the merits of the case.*

Concluding Observations

In viewing Section 5's evolution as a congressionally designed means of combating unfair competition and as an antitrust supplement to the Sherman and Clayton Acts, I venture some general observations.

I do not view with alarm the expansive judicial interpretations of the general standards of Section 5 insofar as they have resulted in removing from the market place the "foul play" of misrepresentation and misappropriation practices comprehended within the generic term "unfair competition." On the contrary, I praise the benefits to the competitive order which have stemmed from these large-scale public interest accomplishments of the Commission.

Likewise, I commend the use of Section 5 to strike down unreasonable restraints of trade generally recognized as barriers to the maintenance of orderly competitive rivalry.

My concern is directed toward the emergence, beginning in the 1960's, of the Commission's misapprehension, bolstered by judicial approval in several of the cases I have analyzed, that Section 5 is a Congressional mandate to convert the prohibitions of that provision into an affirmative regulatory device. This misapprehension is reflected in lack of Commission insistence upon substantial evidence of anticompetitive effects in Section 5 orders against incipient Sherman Act violations and in dilution of the specific Clayton Act standards in attacks upon practices not intended by Congress to come within Clayton Act particularized transgressions. This caution is especially needed to avoid enlargement of per se violation rules beyond the present traditional ones.

My analysis of the decisions in this area of interaction of Section 5 and the Sherman and Clayton Acts lends credibility to my belief that Section 5 can be kept within the orbit of authority Congress intended only by a judicious self-restraint of both the Commission and the courts. In this two-level approach, the initial responsibility lies with the Commission. It is the tribunal vested at the threshold with authority to determine whether a course of conduct or a transaction

* Since this paper was written, the FTC issued an order against Balfour. The respondents are appealing. [Ed.]

has illegal elements of either unfair competition or restraints of trade. The Commission, therefore, has the first responsibility of using its investigatory and adjudicative procedures in a manner that keeps them from overflowing into attacks upon normal competitive methods of seeking patronage in open markets.

But if the Commission strays from the outer boundaries of its Congressional grant of authority under Section 5, it is the responsibility of the courts of appeals, and ultimately of the Supreme Court, to determine on review of the record as a whole whether, as a matter of law, Section 5 has been violated. In the final analysis, this check and balance in judicial review of the Commission's orders is the real safeguard for conserving the lawful rewards of private parties, competitors or non-competitors, while at the same time denying to transgressors the illegal gains of unfair competition and antitrust violations. This is the path to bringing Section 5 into proper relation with the Sherman and Clayton Acts as the Congressional history of those statutes command. (Applause).

MODERATOR OPPENHEIM: Thank you very much, Jack, for that superb paper.

The next speaker is the author of a five-volume treatise on competition. It is now in its third edition, but this third edition also includes antitrust law. In other words, it is now designated as including the law of unfair competition, trademarks, and monopoly. There, I do think, we have a real intersection of those doctrines.

I think all of you know that this comprehensive and authoritative text is a major reference work for lawyers practicing in those areas, and I know that it is frequently cited in the federal and state court opinions.

Now, if this is a plug, a commercial, I am very happy to deliver it, because I don't believe the Madison Avenue boys would have really any way of producing a good commercial on that, as it does for the expanding and contracting Playtex bra. (Laughter)

Dr. Callmann possesses a unique combination of education and practice in Germany and the United States. He holds law degrees from the University of Freiburg and the Harvard Law School.

After 10 years of practice in Cologne, Germany, and subsequent to his Harvard residency, he was admitted to the Bar of New York and embarked upon the practice of law in his area. He received an honorary degree from the University of Cologne, and was named

honorary professor of law in that university.

He is a partner of Green, Callmann and Durr in New York City.

I have known Dr. Callmann since he came to this country in 1936.

It is really notable that the pressing demands of his practice have not deterred him from updating his treatise, writing law review articles, and appearing in forums of associations.

I can't refrain from saying that when Dr. Callmann came to the United States, he did me the honor of calling on me at The George Washington University Law School. I am still puzzled why he asked me if I might recommend the manuscript of his treatise, which I did, and to me it was an honor more than I ever thought.

In writing a letter to Callaghan and Company, the publisher, I was very happy to endorse that fine treatise.

Dr. Callmann's discussion will deal with the impact and implications of the Supreme Court decisions in the *Compco* and *Sears* cases, with which I am sure you are familiar, but I know you will be eager to have his perceptive analysis of what has happened since those decisions.

This raises, as you know, basic issues regarding the relation of Federal preemption under the patent and copyright laws to relief against unfair competition.

He also tells me that he will discuss certain aspects of trade association activities and the interplay of antitrust and unfair competition doctrines in that area.

It is a pleasure to present to you Dr. Rudolf Callmann.

DR. CALLMANN: I blush very easily, and I am very grateful that in your praise you didn't exaggerate with one word. Thank you very much. (Laughter)

Unfair Competition and Antitrust: Coexistence Within Complementary Goals

RUDOLF CALLMANN

A common thread weaves all of our jurisprudence into what Mr. Justice Holmes once felicitously called a "seamless web." Although we separate the strands of the web for compartmentalized study under such familiar labels as "torts," "contracts," "agency" and the like, the common thread that binds them into that "seamless web" is the common purpose of all law. As a general rule, the order of civilized life is an order of peace and it is the ultimate function of our general laws to insure that order of peace and protect it against disturbances by conflict. In that sense all law is related. Business activity, on the other hand, is somewhat different. Competition, by hypothesis, is an order of conflict and it is the ultimate function of such specialized laws as unfair competition and antitrust to preserve that order of conflict and protect it against disturbances by peace. In this sense, we can classify unfair competition and antitrust as blood brothers or, at least, as brothers-in-law.[1]

For analytical purposes, consider, in passing, the vendor-vendee relationship. Initially, the conflict between seller and buyer arises out of the give and take of negotiations concerning the price or quality of the goods; however, if both parties are bargaining in good faith the conflict soon ends because both parties are sincerely striving to effect a peaceful settlement—the ultimate deal—as expeditiously as possible. The same holds true with respect to protracted negotiations between landlord and tenant or between principal and agent. The lease or the employment agreement ends the conflict and sets the framework for a peaceful arrangement for its duration. Even in the area of labor relations, a field so often characterized by violent conflict and unrest, the struggle between labor and managment is essentially focused upon the ultimate restoration, by contract, or a peaceful order. When thousands of otherwise peaceful and hard working employees strike, acting perhaps in self-defense to right some genuine or fancied grievance, the threat of imminent injury to self-interests is the under-

[1] On this theory, see Callmann, *The Law of Unfair Competition, Trademarks and Monopolies,* Vol. 1, §6 (3d ed. 1967).

lying cause of the struggle and both management and labor, sometimes under the auspices of government, strive to restore peace and renew an atmosphere of peaceful understanding as quickly as possible. Peace is the ultimate goal, even though the path to it may sometimes be hazardous and rocky.

The competitive relationship, however, is markedly different. There the struggle is not essentially directed by one competitor *against* his rival. Rather, it is a struggle of all competitors *with* each other for a common prize—the customer's patronage. The conflict arises not because of any threatened injury to self-interest but simply because there is competition and the injury is *damnum absque injuria.* Conflict among rivals is inherent in the competitive relationship and its continuance is, in the nature of things, the essence of truly competitive activity. Indeed, any "entente cordiale" between or among competitors which is designed to achieve peace, by cartels, price-fixing, market allocations or myriad other goals, is at once suspect and the law in this area is not designed to restore peace but to preserve conflict and also insure its continuance under certain fundamental principles of fair play.

The competitive contest is more like the horse race than the prize fight. The combatants in the prize ring strive to knock each other out. The contestants in the horse race vie with each other for the victory, and though the race is to the swiftest, it is governed by rules intended and designed to assure each entrant a fair chance at the prize. Any infraction of the "rules of the game" by drugging a horse or fixing the race, violates the conditions of fair play applicable to all. The 1968 Kentucky Derby incident can be cited in this context. And so it is in business competition. Business rivals must be free to compete and our antitrust laws are essentially designed to insure that freedom. However, even freedom is not an absolute and must be qualified. Therefore, we say that competitors must also compete fairly. Accordingly, each rival's freedom to compete must defer to certain underlying rules of the competitive area—the rules of the game, or if you will, "good sportsmanship" and this is the special province of our law of unfair competition.[2]

---

[2] It is interesting that the Japanese prefer a more ferocious approach to business life by comparing it with war rather than with sport. Marshall McLuhan in *Understanding Media: The Extensions of Man,* (A Signet Book, 1964), p. 208, refers to a Reuters dispatch of December 13, 1962 which reads as follows: "Latest fashion among Japanese businessmen is the study of classical military strategy and tactics in order to apply them to business operations. . . . It has been reported that one of the largest advertising companies in Japan has even made these books compulsory reading for all its employees."

We may start by drawing a rather abstract distinction between two spheres of life: one is an order of peace and the other is an order of conflict and struggle. The law protects both orders. Although much of the law of unfair competition stems from the classical law of torts, it should be noted at the outset that this parentage is somewhat illegitimate. Classically, the law of torts was dedicated to the preservation of the order of peace and to give relief for any violation of it. Assault on personal liberty, by battery, false imprisonment or defamation are classified tortious wrongs precisely because they import violence into the order of peace. It therefore seems erroneous to apply those tort rules, which were designed to restore peace, to the competitive sphere which is essentially an order of continuing struggle where conflict, under certain rules of fair play, is the desideratum.

The rules against unfair competition—or more affirmatively the rules of fair competition—are not designed to bring peace to commercial conflict but to insure its continuance. For this reason, I believe that in the same sense the order of peace is violated by conflict, the order of conflict is violated by peace or by ignoring the underlying rules of the struggle. It is in this context that a violation of the order of struggle which is effected (i.e. by a cartel) is essentially contrary to the antitrust laws; as a corollary, any violation of the rules of the order of struggle essentially involves unfair competition.[3] And here we have highlighted the somewhat synergistic relationship between the law of unfair competition and the antitrust laws.

The thrust of our antitrust law is directed against any arrangements that may undermine or subvert our system of free competition. The law of unfair competition is intended to redress any act of unfairness in the conduct of the on-going competitive struggle. Together, they are intended to preserve conflict so that all competitors are assured of freedom to compete under rules which posit that such freedom must not be abused by unfair tactics. It is interesting to note that unfair competition, as such, and any obstacle to free competition are both classified as "unfair methods of competition" under Section 5 of the Federal Trade Commission Act.

Of course, legal principles which outlaw unfair competition and those designed to insure free competition may be *concurrently applicable.* Under the facts of a particular case, the challenged activity may run afoul of both laws—but for different reasons. Thus, for example, a *boycott* with an avowedly monopolistic intent will be unlawful under the antitrust laws. At the same time, it may also constitute an unfair

[3] See Callmann *op. cit. supra* note 1, §15.1 (b).

attack against a competitor; add the additional element of defamation or an unlawful act of discrimination, and we have a clear-cut case of unfair competition. A predatory pricing policy by selling, for example, at an unreasonably low price for the purpose of eliminating a competitor, is unfair competition under Section 3 of the Robinson-Patman Act and as a violation of an ethical postulate in the sphere of struggle; it is also unlawful price discrimination under Section 2 of the Robinson-Patman Act and if it happens to be motivated by an intent to monopolize trade, it may also violate Section 2 of the Sherman Act.

Add any deceptive practice and there is still another classical violation of the law against unfair competition. Driving a competitor out of business may be, and usually is, unfair competition, pure and simple. But if it is also actuated by an underlying intent to monopolize, it will also be violative of the Sherman and Robinson-Patman Act. It may constitute a direct attack against a competitor or be illegal as unwarranted self-help, and possibly as defamation. At the same time, as a group conspiracy or attempt at monopoly, it may also run afoul of the antitrust laws, and if there is a public interest involved, we have, in all these cases, a violation of Section 5 of the Federal Trade Commission Act.

Although they are symbiotically related, the antitrust laws and the law of unfair competition do have differing goals, and their underlying policy differences may sometimes cause the two to clash. Antitrust principles are designed to protect and preserve absolute freedom of competition in its pristine form. But, like all abstract freedoms, there are limits. Just as freedom of speech gives no license to defame, the right to compete freely does not include a right to compete unfairly. Thus, the law of unfair competition limits that very freedom to fair conduct in conformity with our hypothetical rules of the game. For instance, in the field of resale price maintenance, fair trade acts properly characterize price cutting, even by non-signers, as unfair competition and decisional law imposed upon the trademark owner the positive duty of enforcing his resale price system diligently by treating all dealers equally. On the other hand, the fair trade crisis was precipitated by the revolt of such large volume distributors as department stores, discount houses, chains and the like who insisted upon their freedom to price competitively, especially where they were not even parties to a fair trade contract. The policy collision was inevitable and eventually the antitrust laws prevailed.

Another illuminating illustration of a collision between the two fields of the law is afforded by the Supreme Court's regrettable

pronouncements in the *Sears* and *Compco* decisions.[4] Under the false colors of Constitutional principle, the Court refused to grant relief against what many courts in many countries and our courts for over 50 years, consider clearly predatory competitive conduct—Chinese copying of nonfunctional elements of a product—on the premise that federal policy "may not be set at naught or its benefits denied" by state laws directed against unfair competition. To quote the reasoning: "Just as a State cannot encroach upon the federal patent laws directly, it cannot under some other law such as that forbidding unfair competition give protection of a kind that clashes with the objectives of the federal patent laws."[5]

So, too, we may add, no state law will pass Constitutional muster if it in any way impinges upon, or otherwise affects those federal antitrust laws which guarantee free competition and prohibit the expansion of such statutory monopolies as patents and copyrights. This Constitutional conflict between federal and state jurisdictional authority would cease to exist if we were blessed with that for which many clamor—a federal law against unfair competition. Would then federal policy of the antitrust laws preempt the field and foreclose federal court action against unfair competition? No. We would then have a conflict not of jurisdictional authority but of two different laws of equal rank: unfair competition and antitrust, and this would pose the same hairy question of substantive law for the courts with which they have been wrestling during the last decades with the result that one may freely copy the nonfunctional features of an article unless they have become associated solely with the original manufacturer or source (secondary meaning).[6]

In passing, it should be mentioned that the Supreme Court ignored the different nature of inventive and commercial activity. The former creates the possibility of manufacturing a new article which did not exist, one which gives the public the benefit of a technical or aesthetic advantage; its underlying idea enriches the material world. Commercial activity, on the other hand, uses a new method of merchandising; it essentially reflects investment of capital. Since we live in a capitalistic economy, capital is an important value and the law is obligated to protect it. While an invention is rewarded with a patent, capital investment and efficient advertising are rewarded with second-

[4] Sears Roebuck & Co. v. Stiffel Co., 376 U.S. 225 (1964); Compco Corp. v. Day-Brite Lighting, Inc., 376 U.S 234 (1964).

[5] 376 U.S. at 231.

[6] Crescent Tool Co. v. Kilborn & Bishop Co., 247 Fed. 299 (2d Cir. 1917); Bliss v. Gotham Industries, Inc., 316 F.2d 848 (9th Cir., 1963).

ary meaning. The law of *Crescent Tool*[7] should be restored.

Finally we can examine certain cases in which typical acts of unfair competition are improperly adjudicated under the antitrust laws.

It is always disconcerting to a theorist to read opinions which becloud the issues because the plaintiff misconstrued his remedy. Perhaps it was the failure of our courts to evolve a sound concept of unfair competition[8] that seduced many harrassed plaintiffs to seek redress under the antitrust laws. Even though the defendant's conduct may be unfair competition, pure and unadulterated, the victimized rival is often unwilling to rely upon those still amorphous and emerging principles, which were badly pollinated by such tort concepts as "passing off," deception, trespass and malice. Thus, it is error to rely upon antitrust law principles where the anticompetitive acts involve a misleading use of a firm name, enticing away of employees and salesmen, clandestinely obtaining trade secrets, disparagement of the plaintiff and his goods or interference with business relations.[9]

In boycott cases, the Supreme Court, mesmerized by the debatable principle that every boycott is a per se violation of the Sherman Act, has converted simple cases of unfair competition into antitrust litigation. Shooting rabbits with elephant guns is almost as foolhardy as flushing out big game with fly swatters. The most famous examples are the *Klor's*[10] and *Radiant Burners* cases.[11]

In the *Klor's* case, the plaintiff, a neighborhood retail store brought action against the defendant Broadway-Hale Stores, Inc., a chain department store, which had induced certain national manufacturers and their distributors to discontinue further sales of the plaintiff. The *Radiant Burners* case involved an association which awarded its seal of approval to gas burners passing its tests. At the behest of some of its members, the association withheld its accolades from plaintiff's burners, and two of the gas distributing defendants refused to service plaintiff's burners, thus effectively excluding them from the market.

In both cases, the lower courts held that the complaints described "purely private quarrels" which did not involve a "public wrong proscribed by the Sherman Act." On this conceptual premise, both plaintiffs were denied protection against clearly improper competitive

---

[7] *Supra* note 6.

[8] See Callmann, *op. cit. supra* note 1, §4.1.

[9] See Ace Beer Distributors, Inc. v. Kohn, Inc., 318 F.2d 283 (6th Cir., 1963); Atlantic Heel Co. Inc. v. Allied Heel Co., Inc., 284 F.2d 879 (1st Cir., 1960); Parmelee Transportation Co. v. Keeshin, 186 F. Supp. 533 (N.D. Ill. 1960).

[10] Klor's Inc. v. Broadway-Hale Stores, Inc., 359 U.S. 207 (1959).

[11] Radiant Burners, Inc. v. Peoples Gas Light & Coke Co., 364 U.S. 656 (1961).

conduct and the Supreme Court granted certiorari "to consider this important question in the administration of the Sherman Act."[12] Reversing the lower courts, the Supreme Court took pains to reaffirm the doctrine that "group boycott or concerted refusals to deal with other traders have long been held to be in the forbidden category" and that they are not "saved by allegations that they were reasonable in the specific circumstances"[13] because they have "by their 'nature' and 'character' a 'monopolistic tendency.' "[14]

Analytically, boycott does not even fall into the class of per se violations. Per se violations are only those which, by their nature or character, have under all circumstances a monopolistic tendency or the inevitable result of restraint of trade, such as price-fixing, production control, market division. The boycotts involved in *Klor's* and *Radiant Oilburner* were not motivated by any desire for monopolistic control; it could hardly be said that the defendants in those cases were seeking, or could even hope, to dominate the market. As the lower courts properly held, only "private quarrels" were involved. Nevertheless, such boycotts could also be deemed illegal per se as "naked" boycotts without any justifiable goal, designed only to drive a competitor out of business and, therefore, improper as unfair competition, a tortious, nay even a malicious, interference with business relations or "trespass upon the property" of a "going concern" or an unlawful attack upon a competitor.

The jubilation over the so-called clarification effected by *Klor's* was short-lived; three years later in *Silver* v. *New York Stock Exchange*,[15] the Supreme Court abandoned its absolutist approach to the boycott and unequivocally declared that a boycott might be justified by reference to the policy of another statute, as, for instance, the Securities Exchange Act or *"otherwise."* This might, as the Court said, save a boycott or a concerted refusal to deal from the rigid rule of per se illegality. What does the word "otherwise" mean? I pondered its significance many times, but thus far to no avail. It is clear, for example, that exclusive dealing arrangements are not illegal per se[16] but are subject to the Rule of Reason, although until the *Schwinn* case[17] government attorneys have always insisted upon the per se doctrine. So, too, trade association boycotts have been, despite *Fashion*

---

[12] 358 U.S. 809 (1958).
[13] Klor's v. Broadway-Hale Stores, Inc., *supra* note 10.
[14] *Id.* at 213.
[15] Silver v. New York Stock Exchange, 373 U.S. 341 (1963).
[16] Callmann, *op. cit. supra* note 1, Vol. 2, §38.2 (a) (2).
[17] United States v. Arnold, Schwinn & Co., 388 U.S. 365 (1967).

Originators' Guild,[18] tested by the Rule of Reason and are not denounced as illegal per se.[19]

Perhaps the following suggestion may be of some help in distilling a guiding principle from the rules of the competitive order of struggle. Under the law of unfair competition, a boycott is a means of self defense.[20] Such self-defense may be warranted when injury is imminent and judicial aid is not forthcoming at the time it is most needed. If the court has already refused to act, then resort to self-defense by boycott cannot be sanctioned. On the other hand, if the boycott, in essence, involves an attack upon a particular competitor it amounts to unfair competition. Any appeal to the public may constitute disparagement of its victim. Where the customers of the competing parties are thereby induced to abstain from dealing with one of the rivals, they have been unfairly deprived of their unqualified right to make their own decision freely.

Under the antitrust laws, some justification for a boycott may be derived from the doctrine of ancillary restraints.[21] A "naked" boycott remains illegal per se; it has no reasonable justification and is only anticompetitive, coercive and injurious. If, however, the boycott can be justified as ancillary to a principal lawful purpose, such as the protection of trademarks, a franchise or a business organization, then its use as a competitive weapon may be sanctioned. On analysis, *Klor's* involved a "naked" boycott and was therefore properly outlawed as illegal per se. A regular exclusive dealing agreement, however, is never a naked boycott and trade association boycotts may be motivated by a justifiable reason.

In conclusion, it is clear that a rigid separation of the antitrust laws and the law of unfair competition is neither legally realistic nor economically desirable. Their underlying concepts have complementary goals, and they can co-exist and profitably cross-pollinate each other. They are each, it appears, interlocking segments of the giant, and sometimes perplexing, jig-saw puzzle that makes up the mosaic of our socio-economic structure.

Thank you. (Applause)

---

[18] Fashion Originators' Guild of America v. Federal Trade Commission, 312 U.S. 457, 465 (1941). The boycott in the Fashion Originators Guild case was not motivated by a monopolistic intent but it was unlawful because self-help is only permissible against unlawfulness; style piracy, however, is not considered unlawful.

[19] Callmann, *op. cit. supra* note 1, Vol. 2, §38.3 (c).

[20] Callmann, *op. cit. supra* note 1, Vol. 1, §8.1 (b).

[21] Callmann, *op. cit. supra* note 1, Vol. 1, §15.3 (c) (4).

MODERATOR OPPENHEIM: Thank you, Rudolf.

Our final speaker is asked to deal with the problem of franchising as a method of marketing. This has risen to massive proportions, and Professor Dole will analyze the interplay of trade symbol protection and the antitrust laws arising from franchise restrictions, with particular reference to the licensing of trademarks.

Richard F. Dole is an associate professor of law at the University of Iowa. He received his LL.B. and LL.M. degrees from Cornell University. Thereafter he was appointed a research Fellow of the University of Michigan Law School. In that capacity, he served on the staff of the Law School's Legislative Research Center. During that time, he was a candidate for the Doctor of Juridical Science degree, which was awarded to him in 1966.

It was a very gratifying experience for me when I was serving actively on the law faculty at Michigan to be on the advisory committee in connection with two major research projects of Professor Dole.

One of them resulted in a monograph, which has already attracted great interest, on Territorial Trademarks and the Anti-Trust Laws, published by the Law School in 1965.

As a second project, Professor Dole was the draftsman of the Uniform Deceptive Practices Act, which was recommended in 1964 to the states by the National Conference of Commissioners on Uniform State Laws. It was also recommended by the American Bar Association House of Delegates, and the ABA Section of Patent, Trademark and Copyright Law. The Act, Professor Dole tells me, has been enacted in some eight states.

He is also the author of numerous law review articles.

I submit this is an impressive record of accomplishments over a span of a few years, and it certainly foreshadows more like milestones in his professional career.

I take pride in presenting a former student of mine, a brilliant former student, Richard F. Dole. (Applause)

PROFESSOR DOLE: Thank you very much, Oppie.

Unlike Dr. Callmann, I feel quite modest, and won't say anything at all about your introduction.

The Interplay of Trade Symbol Protection and the Antitrust Laws

RICHARD F. DOLE

The modern penchant for franchising has led to a spate of recent decisions concerning the relationship between trade symbol protection and the antitrust laws. Trade symbols are frequently, though not necessarily, intertwined with franchising. Before discussing trade symbol-antitrust problems involving franchising, however, I wish to point out an older interaction between trade symbols and the antitrust laws. The United States Supreme Court decisions of *Hanover Star Milling Co.* v. *Metcalf*,[1] and *United Drug Co.* v. *Theodore Rectanus Co.*,[2] held that a person who adopted a trade symbol in good faith could acquire territorial rights in the trade symbol despite the fact that another person had previously used a similar symbol on competing goods in another geographical market. This doctrine of concurrent territorial trade symbol rights is anticompetitive. Because each concurrent user of the same mark can acquire trade symbol rights in his own trade territory, overlap between these territorial markets can be precluded by a trade symbol infringement suit.[3] If this same result were achieved by conscious agreement between the various trade symbol users rather than by virtue of principles of trade symbol law, the agreement would constitute a per se violation of the Sherman Act under the *Timken* case.[4]

Perhaps the most notable illustration of the anticompetitive consequences of the *Hanover* and *Rectanus* doctrine is provided by the *Standard Oil* cases. Through repetitive litigation, various units of the dissolved Standard Oil combination have prevented other former Standard Oil subsidiaries from entering markets under the "Standard" name. In the most recent of this series of cases, *Standard Oil Co.* v. *Humble Oil & Refining Co.*,[5] the Fifth Circuit declared that Standard Oil of Kentucky, which did business as "Standard Oil," was entitled to

---

[1] 240 U.S. 403 (1916).
[2] 248 U.S. 90 (1918).
[3] E.g., Esso, Inc. v. Standard Oil Co. of Indiana, 98 F.2d 1 (8th Cir. 1938).
[4] Timken Roller Bearing Co. v. United States, 341 U.S. 593 (1951).
[5] 363 F.2d 945 (5th Cir. 1966), *cert. den.*, 385 U.S. 1007 (1967).

an absolute injunction within its five-state marketing area against the use of "Esso" by Humble Oil & Refining Company, a wholly owned subsidiary of Standard Oil Company of New Jersey. The Fifth Circuit brushed aside Humble's argument that the injunction was anticompetitive with the comment:

> There is not now, nor has there ever been, a conflict between the antitrust laws and the trademark laws or the law of unfair competition. The antitrust laws could go no further than to envision Humble's entering the market and competing under one of its non-Standard Oil tradenames and marks.[6]

This comment by the Fifth Circuit misses the thrust of Humble's argument. Granted that the *Humble* decree did not constitute an antitrust violation, the decree was nonetheless needlessly anticompetitive. The court could simply have enjoined Humble from using "Esso" in a manner which was likely to be confused with "Standard Oil." There was evidence, for example, that Humble had advertised that "Esso" means "Standard Oil." Such confusing claims could be forbidden without total prohibition on the use of "Esso." Alternatively, the court could both have required Humble to use "Esso" in a manner which was not likely to be confused with "Standard Oil" and required Humble to disclose itself as the user of "Esso" with a disclaimer of any connection with Standard Oil of Kentucky. Such a qualified injunction would have minimized the trade symbol barriers to Humble's penetration of Standard Oil of Kentucky's market area without undue consumer confusion. Although qualified decrees may promote consumer confusion in some situations,[7] "Esso" was sufficiently distinct from "Standard Oil" and sufficiently well-known as a trade symbol to permit consumer discrimination, especially if a disclaimer of relationship with Standard Oil of Kentucky were also present.[8]

The Fifth Circuit's failure to consider utilization of a qualified

---

[6] 363 F.2d 945, 954. Humble raised the same argument in a fruitless petition for certiorari. ATRR. 287: A-13 (1/10/67).

[7] E.g., John B. Stetson Co. v. Stephen L. Stetson Co., 14 F. Supp. 74 (S.D.N.Y. 1936), *mod;* 85 F.2d 586 (2d. Cir. 1936), *cert. den.,* 299 U.S. 605 (1936), contempt proceedings, 128 F.2d 981 (2d Cir. 1942); 133 F.2d 129 (2d Cir. 1943); see R. Dole, *Territorial Trademark Rights and the Antitrust Laws,* (Michigan Legal Publications 1965), pp. 25-29.

[8] In denying relief to Standard Oil of Kentucky, the trial court in the Humble case found as a fact that "Esso" was not unduly productive of confusion with "Standard Oil." Standard Oil Co. v. Humble Oil & Refining Co. 229 F. Supp. 586, 631 (S.D. Miss. 1964). However the Fifth Circuit treated this finding as "clearly erroneous" without considering whether the degree of confusion involved, although sufficient to justify relief, might have been insufficient to require an absolute decree. Standard Oil Co. v. Humble Oil & Refining Co., 363 F.2d 945, 948-52 (5th Cir. 1966), *cert. den.,* 385 U.S. 1007 (1967).

decree may not have been excessively anticompetitive in the *Humble* case itself. Humble Oil & Refining Company possesses sufficient wherewithal to launch a new brand of gasoline in Standard Oil of Kentucky's market area.[9] The true vice of the absolute injunction approach of the *Standard Oil* cases is that the approach is also applied where a market collision occurs between firms with far fewer resources. Smaller firms are obviously less likely to make the investment necessary to launch a new brand and more likely to settle for an anticompetitive divison of markets based on areas of trade symbol rights. However, to some extent, the *Standard Oil* cases represent an anachronism.

Since July 5, 1947, the constructive notice provision of the Lanham Trademark Act[10] has accorded trade symbol registrants nationwide protection against subsequent good faith junior users.[11] The broad territorial rights conferred by the Lanham Act are, in fact, more generous than many trade symbol registrants can themselves utilize. This is one of several reasons why trade symbol licensing, which was placed on a firm legal footing by the Lanham Act,[12] has expanded enormously since enactment of the Lanham Act. The boom in trade symbol licensing has, of course, gone hand-in-hand with the evolution of franchising as a common marketing technique.

A little over a year ago the United States Supreme Court decided *United States* v. *Sealy, Inc.*,[13] one of several recent judicial decisions involving trade symbols in a franchising context. Sealy is an "umbrella corporation" which licenses independent bedding manufacturers to make and sell bedding products under the Sealy name. In the Supreme Court, the issue was whether Sealy could lawfully require its licensee-manufacturers, who actually controlled Sealy's board of directors and executive committee, to restrict their manufacture and sale of Sealy brand products to specific trade territories. The Court held "no" because the territorial restraints, which were in substance horizontal, were "part of an aggregation of trade restraints including unlawful price-fixing and policing."[14] The legality of the territorial allocations in the absence of illegal price fixing and policing was expressly

---

[9] Cf. Sherman, "Trademark Problems As I See Them," *Trademark Reporter*, Vol. 52 (1962), p. 1190.

[10] § 22, 60 Stat. 435 (1946), 15 U.S.C. § 1072 (1964).

[11] Dawn Donut Co. v. Hart's Food Stores, Inc., 267 F.2d 358 (2d Cir. 1959).

[12] § 5, 60 Stat. 429 (1946), 15 U.S.C. § 1055 (1964); § 45, 60 Stat. 443 (1946), 15 U.S.C. § 1127 (1964).

[13] 388 U.S. 350 (1967).

[14] United States v. Sealy, Inc., 388 U.S. 350, 357 (1967).

left open in *Sealy*.[15]

The Court's failure to condemn the *Sealy* territorial allocations out-of-hand has led some commentators to suggest that the presence of limited territorial trade symbol licenses made a difference in *Sealy*, in other words, that the territorial restrictions in *Sealy* could be considered to be reasonably ancillary to Sealy's trade symbol licensing program in the absence of specific evidence of an anticompetitive purpose.[16] I believe that such speculation is unsound. The obligation of a trade symbol licensor to control the nature and quality of the goods or services on which his licensees use a trade symbol does not require control of the licensees' trade territories. The essence of quality control is the specification of production and product standards by the licensor plus periodic inspection by the licensor in order to ensure licensee compliance with those standards.[17]

Most products and services, like the bedding products involved in *Sealy*, can be produced and sold on a quality-controlled basis in any of the 50 states. Moreover, because purchasers of goods from one licensee can resell the goods in another licensee's territory, a system of exclusive sales territories is of less assistance in tracing defective goods to a particular licensee than a requirement that each licensee place his individual trade symbol, in addition to the licensed mark, on goods produced under the license.[18]

If the record in the *Sealy* case is read carefully, it becomes apparent that the argument was never seriously made that trade symbol law requires limited territorial licenses. The district court decision, which sustained the territorial restrictions, was based on the premise that the territorial restrictions were necessary in order for the *Sealy* joint venture to attract capital. Judge Austin gave little or no weight to the exigencies of trade symbol law.[19] Moreover, the issue left open by the Supreme Court in *Sealy* was whether a number of small grocers could lawfully allocate territory among themselves in connection with the launching of a new brand and not whether trade symbol law requires limited territorial licenses.[20]

It is clear to me that trade symbol law offers no special justification for either horizontal or vertical territorial restrictions. It was no co-

---

[15] *Id.* at 357.

[16] E.g., ATRR 312: B-3 (7/4/67).

[17] Treece, "Trademark Licensing and Vertical Restraints in Franchising Arrangements," *University of Pennsylvania Law Review*, Vol. 116 (1968), pp. 435, 466.

[18] R. Dole, *supra* note 7, at 132-33.

[19] United States v. Sealy, Inc., 146 *USPQ* 6, 17-23 (N.D. Ill. 1964).

[20] United States v. Sealy, Inc., 388 U.S. 350, 357 (1967).

incidence that it was a territorial allocation case, the *Timken* case, in which the Supreme Court declared: "A trademark cannot be legally used as a device for Sherman Act violation."[21] Incidentally, the question reserved in the *Sealy* case may be answered relatively soon. In *United States* v. *Topco Associates, Inc.*,[22] the Justice Department has attacked limited territorial trade symbol licenses utilized by an umbrella distributor owned by 25 grocery chains.

United States v. *Arnold, Schwinn & Co.*,[23] a case which was argued and decided at the same time as *Sealy*, has more relevance to the legality of trade symbol license restrictions under the antitrust laws. *Schwinn* involved territorial restrictions in a vertical distribution system. Schwinn allocated dealers to wholesalers and jobbers on a geographical basis and only franchised dealers with respect to designated locations. In this context, the Supreme Court held that it was a per se violation of the antitrust laws for Schwinn to impose any territorial or customer restrictions on bicycles that had been purchased by dealers or distributors. On the other hand, where Schwinn retained ownership and risk of loss of the bicycles a Rule of Reason approach was applied and the legality of Schwinn's customer and territorial restrictions was sustained.[24]

Schwinn holds few obvious portents for trade symbol licensing because Schwinn's distributors and dealers did not need to be and were not trade symbol licensees. The goods which the distributors and dealers handled bore genuine Schwinn trade symbols that were affixed by Schwinn itself.[25] Nonetheless, some commentators have suggested that *Schwinn* raises serious questions concerning the vitality of the *Carvel* rules concerning permissible trade symbol restraints.[26]

There are two *Carvel* cases. In *Susser* v. *Carvel Corp.*[27] the Second Circuit considered the validity of tying and exclusive dealing provisions in trade symbol licenses. A tying arrangement is, of course, a

---

[21] Timken Roller Bearing Co. v. United States, 341 U.S. 593, 599 (1951).

[22] United States v. Topco Associates, Inc., ATRR 340: A-14 (N.D. Ill. 1968).

[23] 388 U.S. 365 (1967).

[24] The Court stressed the following factors as determinative of its evaluation of Schwinn's plan: (1) other competitive bicycles were available to distributors and retailers in the marketplace; (2) Schwinn distributors and dealers handled other brands of bicycles; (3) the vertical restraints were untainted with price fixing; and (4) Schwinn's program strengthened and protected Schwinn's competitive position in markets dominated by large sellers. 388 U.S. at 379-82.

[25] R. Dole, *supra* note 7, at 110-11.

[26] E.g., Symposium, "Restrictions Ancillary to the Protection of Goodwill and Trademarks," *American Bar Association Antitrust Law Journal*, Vol. 36 (1967), pp. 49, 97-99.

[27] 332 F.2d 505 (2d Cir. 1964), *cert. dismissed*, 381 U.S. 125 (1965).

requirement that a purchaser buy another item whenever he purchases a particular item, and an exclusive dealing arrangement is a requirement that a business refrain from dealing with other businesses if it wishes to deal with the party imposing the restriction.

Carvel Corporation is a vendor of soft ice cream products which franchises retail outlets. Two types of tying arrangements were evaluated in *Susser*. Dealers were obligated to purchase their entire requirements of supplies, machinery, and paper goods from Carvel or from Carvel-approved sources under one agreement. The other agreement only required dealers to purchase from Carvel or Carvel-approved sources supplies which were a part of the end product that was sold to the public.

A tying arrangement is considered unlawful where there is little or no justification for the arrangement and where the party using the arrangement possesses sufficient economic power with respect to the tying item to appreciably restrain competition in the market for the tied item and a not insubstantial amount of interstate commerce is affected.[28] In *Susser* the Second Circuit agreed that the tying item was the Carvel trade symbol but disagreed as to whether Carvel possessed significant economic power with respect to the tying item and as to whether advance specification of standards was feasible for the products sold by the Carvel dealers. Of course, if advance specification of standards had been feasible, tying would have been unnecessary.

The majority in *Susser* held that the the Carvel trade symbol was not of sufficient economic power to create an illegal tying arrangement and that the record sustained the finding of the trial judge that it would have been impractical and unreasonable to require Carvel to formulate standards for accessory products. Moreover, the majority declared that in any event Carvel could have tied the sale of its secret formula ice cream mix to the trade symbol license because use of this mix was necessary in order to preserve the trade symbol's identity.[29] The dissenting judge argued that a trade symbol, like a patent or copyright, should presumptively be considered to possess enough economic power to cause a tying violation and that Carvel had failed to establish that it was impossible to formulate specifications for all of the tied products, including the ice cream mix.[30]

The Carvel franchises contained exclusive dealing arrangements as well as tying arrangements. Carvel franchisees were permitted to sell *only* Carvel or Carvel-approved products. However, the Second Circuit

[28] Northern Pacific Railway Co. v. United States, 356 U.S. 1 (1958).
[29] 332 F.2d at 518-21.
[30] *Id.* at 510-516.

was unanimous in sustaining these exclusive dealing arrangements under the rule of reason approach of the *Tampa Electric* case.[31] The court pointed out that there was a dearth of the economic evidence that was necessary in order to establish a violation according to the *Tampa Electric* criteria and also declared that Carvel's trade symbol licensing program provided independent justification for restricting Carvel dealers to the sale of products sold by or approved by Carvel.[32]

A second *Carvel* case was decided by the Federal Trade Commission. In *Carvel Corp.*,[33] the Commission dismissed a complaint which alleged that Carvel's franchise system violated Section 5 of the Federal Trade Commission Act. The Commission held that a trade symbol could not conceptually constitute a tying item with respect to items identified by the trade symbol because such items were one and the same with the trade symbol. The Commission also declared that Carvel's restrictions were reasonably ancillary to the protection of its trade symbol and that complaint counsel had failed to establish that Carvel could have adequately performed its obligation of quality control through the use of specifications with respect to the ice cream mix. The Commission conceded that specifications might have been adequate with respect to accessory products, like toppings, nuts, cones, and the like, but held that the record failed to establish that a significant amount of commerce was affected by these restrictions.

Schwinn's per se rule barring territorial restrictions on the sale of goods that have been sold to dealers does not directly relate to *Carvel*-type restrictions concerning goods that can be sold in conjunction with goods that have been sold to dealers. Nonetheless, the *Schwinn* analogy is suggestive and reinforces the customary "virtually per se" illegality of tying clauses. This is important because the Second Circuit was unanimous in *Susser* v. *Carvel Corp.* in acknowledging that an illegal tying arrangement could result from the linking of the purchase of goods or services to the license of a prominent trade symbol. Moreover, although the Federal Trade Commission asserted in its *Carvel* decision that a trade symbol could not conceptually

---

[31] Tampa Electric Co. v. Nashville Coal Co., 365 U.S. 320 (1961). In Tampa Electric the Court enunciated the following as factors to be weighed in evaluating the legality of exclusive dealing arrangements: The relative strength of the parties; the proportional volume of commerce involved in relation to the total volume of commerce in the relevant market area; and the probable immediate and future effects which preemption of that share of the market might have on effective competition therein. 365 U.S. at 329.

[32] Susser v. Carvel Corp., 332 F.2d 505, 516-18 (2d Cir. 1964), *cert. dismissed*, 381 U.S. 125 (1965).

[33] Dkt. 8574, CCH FTC Complaints, Orders, ¶ Stipulations 17, 298 (1965).

constitute a tying item for products identified by the trade symbol, later in the opinion Commissioner Jones went out of her way to point out that Carvel has a considerable number of competitors and that there was relatively easy entry into the soft ice cream business.[34] Thus, both *Carvel* decisions contain clear warnings to at least trade symbol licensors with significant market power and trade symbol users who license their symbols in markets where there are substantial barriers to entry: these licensors must have sound business reasons for tying the purchase of goods or services to the license of their trade symbols.

The *Carvel* cases illustrate one business reason that is obviously good—aspects of a product which are derived from a secret formula can be required to be purchased from the licensor or from designated suppliers. Requiring the utilization of specifications in this situation would destroy the secrecy of the formula. On the other hand, where components of a basic product are readily available on the open market, the mere fact that an item goes into the basic product identified by a trade symbol may well be insufficient to justify tying its purchase to the trade symbol license without evidence that the formulation of adequate specifications would be impossible.[35] The difficulty of enforcing specifications which was alluded to in *Susser* may also prove to be an insufficient justification for tying even the purchase of a product component to a trade symbol license without evidence of more than an abstract possibility that licensees will default in their own quality control. A possibility of default may, for example, have existed in the *Carvel* cases where each licensee's investment in his franchise was relatively low. However, where a licensee's investment is substantial, a slipshod performance is less likely and the mere difficulty of enforcing compliance with specifications may not justify a tying arrangement.

It goes without saying that tying the purchase of accessory products to a trade symbol license is more questionable than tying the purchase of product components. Both *Carvel* cases dismissed such charges on the ground that a *de minimis* amount of interstate commerce was involved. Where this is not the case, trade symbol licensors beware.[36]

---

[34] *Id.* at p. 22, 429.

[35] See Wilson, "Exclusionary Restraints and Franchise Distribution," *Antitrust Bulletin,* Vol. 12 (1967), pp. 1169, 1175-77.

[36] See Rudnick, "The Franchisor's Dilemma: Can He Satisfy the Legal and Commercial Requirements of a Trademark Licensing System Without Exposing Himself to Other Legal Risks," *Trademark Reporter,* Vol. 56 (1966), pp. 621, 629 n. 13.

It seems reasonably clear that exclusive dealing arrangements are principally justified by trade symbol licenses where a licensee does business under the licensor's trade symbol in addition to selling goods or services identified by the licensor's trade symbol. Howard Johnson licensees, for example, do business under the licensor's trade name as well as sell the licensor's goods. This situation, which also existed in the *Carvel* cases, gives the licensor an interest in all of the goods or services sold by a licensee. However, where a licensee does business under his own trade name, as the *Sealy* licensees did, the licensor's interest is primarily confined to the manner in which the licensee uses the trade symbol in connection with the particular goods or services to which the symbol relates. In this latter situation, the license will not ordinarily justify an exclusive dealing arrangement.[37]

Schwinn, and *Sealy* for that matter, also have potential antitrust implications for international trade symbol arrangements. Both *Schwinn* and *Sealy* involve applications of the antitrust laws in order to preserve *intra*brand competition. One obvious way in which trade symbols can be used to interdict intrabrand competition is through utilization of Section 526 of the Tariff Act. Section 526 directs customs officials to bar importation of foreign merchandise which bears trade symbols that infringe registered American trade symbols.[38] Section 526 accordingly permits foreign trade symbol users to insulate their American distributors from intrabrand competition. A foreign trade symbol user simply assigns his American trade symbol rights to his American distributor and the American distributor registers the trade symbol in the United States and files the trade symbol with the Secretary of the Treasury in order to bring Section 526 into play. Thereafter, customs officials will bar importation into the United States of foreign goods bearing the genuine trade symbols of the foreign manufacturer unless the American distributor, the possessor of the American rights to the symbol, consents to their entry.

The Justice Department launched an abortive attack on use of Section 526 by related companies during the Eisenhower Administration. The Department prevailed in the district court on monopolization and attempt to monopolize theories in *United States* v. *Guerlain.*[39] However, the government dropped the case at the last minute because of interdepartmental conflict—the Bureau of Customs was

[37] Jones, "The Growth and Importance of Franchising and the Role of Law," *Antitrust Bulletin,* Vol. 12 (1967), pp. 717, 743-44; LeBlanc, "Department of Justice and Trademarks," *Trademark Reporter,* Vol. 54 (1964), pp. 511, 519-21.

[38] § 526, 46 Stat. 741 (1930), 19 U.S.C. § 1526 (1964).

[39] United States v. Guerlain, Inc. 155 F. Supp. 77 (S.D.N.Y. 1957).

required by statute to abet the challenged conduct.[40] Now, with *Schwinn* and *Sealy* in the background, a Justice Department representative has suggested that the Department may be reevaluating the need for litigation concerning utilization of Section 526 by related companies.[41] If litigation does ensue, the attempt to monopolize holding of the *Guerlain* case is the theory to watch.[42]

In conclusion, I suggest that the subject of my remarks is most timely. On June 10th, the Supreme Court limited the *in pari delicto* defense to treble damage claims,[43] and the number of treble damage class actions is increasing.[44] Both of these developments make it easier for large numbers of trade symbol licensees to sue licensors for antitrust violations. Both of these developments make it expedient for trade symbol licensors to bear in mind the Supreme Court's admonition in the *Timken* case; namely, that: "a trademark cannot be legally used as a device for Sherman Act violation."[45]

Thank you. (Applause)

Panel Discussion and Question Period

MODERATOR OPPENHEIM: Thank you, Dick.

Now, I am going to try to keep very much on schedule. We have about 15 minutes for questions.

I would like to start with you, Jack. I like the word you coined, "overplay," and I don't want to overplay that one, but in your remarks you talked about the overplay of Section 5 of the FTC Act, and I wonder if you think that tendency has a counterpart in other provisions which the Commission administers and enforces, for example,

---

[40] United States v. Guerlain, Inc., 155 F. Supp. 77 (S.D.N.Y. 1957), probable jurisdiction noted, 355 U.S. 937 (1958), leave to vacate judgment obtained, 358 U.S. 915 (1958), *case dismissed,* 172 F. Supp. 107 (S.D.N.Y. 1959); see Stern, "Solicitor General's Office," *American Bar Association Journal,* Vol. 46 (1960), pp. 154, 157.

[41] See Kestenbaum, "Enforcement Policy on Foreign Trademark Licensing," *American Bar Association Antitrust Law Journal,* Vol. 36 (1967), pp. 74, 81-83.

[42] See R. Dole, *supra* note 7 at 14-18 & n. 70.

[43] Perma Life Mufflers, Inc. v. International Parts Corp., ATRR 361: X-15 (6/11/68).

[44] E.g., Siegel v. Chicken Delight, Inc., 271 F. Supp. 722 (N.D. Cal. 1967).

[45] Timken Roller Bearing Co. v. United States, 341 U.S. 593, 599 (1951).

Section 7 of the Clayton Act. What would you say to that, Jack?

MR. HOWREY: Yes, I think the overplay of Section 7 may even be more striking than that of Section 5. That is, Section 7 of the Clayton Act.

That section, as you know, prohibits one corporation from acquiring the stock or assets of another corporation where the result may be a substantial lessening of competition or a tendency toward monopoly.

The only remedy mentioned in the statute is that of divestiture, and yet, the decrees under Section 7, merger case decrees, both litigated and consent decrees, contain all kinds of ancillary prohibitions and provisions entirely foreign to the statute. They cover such things as interlocking directorates, price discriminations, advertising prohibitions, exclusive dealing, tying arrangements—every known kind of practice in the antitrust and trade regulation fields.

Of course, where one consents—there isn't much anyone can do about it—but it seems to me such ancillary provisions should not be included in litigated decrees.

MODERATOR OPPENHEIM: I believe we will have to be rather brief in the answer, Rudolf.

I have this for you: How would the protection of trade secrets be affected by the *Sears* and *Compco* decision?

DR. CALLMANN: This question, the impact upon trade secrets, has been discussed recently twice, once in a decision of the Pennsylvania Supreme Court in *Van Products* v. *General Welding,* and also by Mr. Doerfer in an excellent article in one of the last issues of the *Harvard Law Review* in 1967.

They all agree that *Sears* and *Compco* has not yet been construed to apply to trade secret questions.

The Pennsylvania Supreme Court referred to the old jurisdictional distinction between patent cases and patent questions, giving a state court jurisdiction, and the court said that you can't find any case in which a conflict between patent law and trade secret law could arise, because both laws follow the same goal, to encourage inventions.

Mr. Doerfer, and I agree with him, noted that there could be one case when a trade secret owner files an application for a patent, and is considered to remain the trade secret owner, although the patent has been invalidated.

MODERATOR OPPENHEIM: Thank you.

Dick, I think you have helped reduce the temperature in addition to the air conditioning, by understandably, I think, issuing some chilly warnings about potential law suits.

When you had that part in drafting the Uniform Deceptive Practices Act, does that Act give the consumer, as well as the businessman, standing to sue?

PROFESSOR DOLE: This is a question that is currently being litigated in several states. There is no question that businessmen can sue under the Uniform Act. I think there is also a substantial argument that a consumer can sue because of the plain words of the statute. The statute doesn't differentiate between classes of plaintiffs. It simply talks about a person likely to be damaged. I would also point out that Julius Lunsford, who many people here may know, published an article in the February issue of the *Trademark Reporter,* in which he said that a consumer could sue under the Uniform Act.

MODERATOR OPPENHEIM: I have delicious questions here, but I am afraid we will have to refrain from asking them, but I can't refrain from letting off a little steam on a decision of the Supreme Court last Monday.

In the case of *Fortnightly Corporation* against *United Artists Television,* if you have read it, you know that the Court held that the CATV system of reception and transmission by cables to paying subscribers of television station broadcasts of copyrighted works does not constitute infringement, because such reception and transmission do not constitute a performance within the meaning of the copyright statute.

Now, let me say in very brief terms, that I don't think a further study of the opinion will change my mind.

I agree heartily with, and I recommend to you, the reading of Justice Fortas' dissenting opinion. He was the only one who dissented.

When I taught this subject, one thing that gave me bad visceral reactions—well, indigestion—was the idea of a "free ride" on another's property rights.

As a matter of fact, Harold Baker, who is a partner of Jack Howrey, and a former student of mine, wrote a law review comment critical of this "free ride" doctrine.

Compco and *Sears* gave us hope that there would be an antidote to the effect of not giving broad scope to protection against unfair competition by product simulation in the state courts. We thought that if a claim arises under the federal copyright or patent statute, that preemption would, in all of its glory, protect those rights.

The Supreme Court has held that the CATV business enterprise, and let me tell you it has gone way out of infancy—it is really a multimillion dollar industry—can get a "free ride" on copyright

owners as if they were a nonprofit or charitable, or at least eleemosynary institution. They charge fees for the hookup of the cable, and the householder pays for this.

What does this mean? It means instead of this promise and hope, that if you do come under the copyright law, you have protection for unauthorized use, the Court holds the CATV reception and transmission is not a "performance" within the Copyright Act.

The Court, to dodge that, I think, or rationalize it out of existence, said that this wasn't a performance within prior case precedents.

Therefore, this fails to take into account all of the technological changes, so that the copyright law is interpreted as of 1968, and not as of 1909. The Court should take into account both the dynamics of technological change and the economic interests of the TV stations and copyright owners.

I submit that in the CATV area, there have been some marvelous technological changes of the kind that we heard Dr. Kincaid tell us about. But this should not vitiate existing copyright interests.

So I just wanted to get this off my chest. I feel very unhappy about this idea that you can get a "free ride" on the creation of the copyright owners.

Maybe the Supreme Court was infected by the idea that in its other decision upholding the jurisdiction of the FCC to regulate CATV, it thought that the Commission could now take hold and decide how to compose and reconcile these interests. But in the meantime, I can't see this misappropriation, this reaping the fruits of another's copyrighted authorship.

I just feel better, now, and I will enjoy my drinks more during this evening's Kettering Award dinner.

Ladies and Gentlemen, let me tell you how much we appreciate your staying to the end.

I have a story relevant to this. There was a symposium, and there was a succession of speakers, and the speaker before the last went way beyond his allotted time, and had gone even beyond the time I am going now, and there, sitting before him, was one lone person, in that front row, and he showed the most intense interest in the last speaker.

He seemed to be sitting on the edge of his seat with overpowering interest.

When the speaker finished, and there he was with one person in the room, he said, "My dear friend, let me express my deep gratitude to you. You did me the honor of remaining to the end. I hope not a bitter end."

The other gentleman said, "Oh, sir, I hope you practice reciprocity, because, you see, I am the next speaker." (Laughter)

I know you will join me in a vote of thanks to the panel. (Applause)

(Whereupon, at 5:55 p.m., the afternoon session adjourned.)

The Kettering Award Address

The Kettering Award Address was given by Stephen P. Ladas, Senior Partner in the firm of Langner, Parry, Card and Langner of New York, at the Award Dinner of the Twelfth Annual Public Conference of The Patent, Trademark, and Copyright Research Institute on Thursday evening, June 20, 1968, at the Shoreham Hotel, Washington, D. C.

Dr. Ladas received the Institute's 1967 Charles F. Kettering Award in recognition of his outstanding contributions as lawyer, scholar, and public servant, and for his meritorious work in patent, trademark, and copyright research and education.

Existing Uniformity of Industrial Property Laws and Revised Patent of Introduction: Means for Transfer of Technical Information to Less Industrialized Countries

STEPHEN P. LADAS

EACH AGE HAS ITS OWN CHALLENGE. Our world of today is a fast moving, rapidly expanding society in a great process of transition, with the challenge of recognizing the rising demands of people everywhere to a decent standard of living, and to the full recognition of their dignity and their worth as human beings.

We are witnessing in recent years a metamorphosis of our world due primarily to the surging tides of technology and the practical applications of vast developments in scientific knowledge. And this is probably still the beginning. Science forges ahead in a hundred directions. The results of researches and inventions feed upon each other continuously and synergetically to enlarge the whole.

Human ingenuity and intelligence is engaged in the highly rewarding and at the same time spiritual endeavor to relieve human hardship, liberate the human spirit and provide for conditions of enjoyment of life. This endeavor must reach affluent and poor peoples alike. Failure to extend the benefits of technology and science to large parts of the world is not only morally wrong, but in the long run it denies to the total system its ultimate fulfillment. Prosperity like peace is indivisible. The accelerated pace of the West's own economic progress could be nullified by the failure of the rise in the standard of living of the largest part of the world.

To meet this challenge nationally and internationally, our free world relies largely on private initiative and organization. This does

not exclude government policies of coordination and allocation of tasks and protection of public interest, but it does mean an ultimate freedom of private enterprise in investment of capital, technology and human resources.

Our economically organized society postulates certainty and predictability as to incidents and consequences of industrial and commercial undertakings. It also postulates that men must be able to assume that they may control, for purposes beneficial to themselves and to society, what they have discovered and to appropriate to themselves what they have created by their own labor and what they have acquired under the existing social and economic order.

It is to fulfill these postulates which is the object of the law of industrial property. This law, as any other branch of law, is a body of knowledge and experience by which we seek, by the elimination of friction and waste, to recognize, reconcile and satisfy the whole scheme of concurrent or conflicting interests, claims and demands pressing upon the legal order. These are individual as well as community and social interests, claims and demands. They are basically the same whether we are dealing in a national or international framework or whether we are dealing with developed or developing countries.

Since the end of industrial property law is the same, there has been in recent times a pressing demand for unification or harmonization of this law on a worldwide basis in the hope that this may lead to automatic world recognition of rights of industrial property. This calls for some elucidation of the problem of law and of the problem of technology for developing countries.

Discussion on unification or harmonization of law has suffered from an initial false assumption that law is a simple single conception. When we think of law, as we must, as an apparatus by which judicial and administrative agencies determine the acquisition, maintenance and enforcement of rights in industrial property, we find four distinct elements in law, as Dean Pound has taught us: first, legislative texts and regulations containing rules of law and procedures for their application; second, judicial and administrative decisions construing and applying these texts; third, traditional techniques and modes of handling legal materials; and fourth, philosophical, political and ethical ideas and ideals, as the end of law, by which the texts, decisions or techniques are continuously shaped.

When speaking of uniformity of law in the international field, many are apt to be thinking only of the first element in law. While this in itself is not a simple institution and may be of different types, the other three elements are of decisive importance. When they have

reached a certain fixity in the judicial and professional tradition, these elements give to law its living content; they constitute the law "as is" rather than the illusion of law.

Another point to bear in mind is that any attempt at unification or harmonization involves a change of existing law. This raises the perennial problem in law of the reconciliation of the conflicting demands of the need of stability and the need of change. There can be, of course, nothing real without both. As Whitehead has said: mere change without stability or conservation is passage from nothing to nothing. Mere conservation without change cannot conserve.

It may be that the world is changing faster than we can change ourselves and our institutions. But lawyers cannot ignore the need for stability even in periods of rapid growth. For we must always strive to retain in a continuously evolving environment those things which are achievements of value, for it is these that give endurance and our civilization depends on endurance.

Patent lawyers have been accused of being conservative and reluctant to accept change. This is not a criticism reserved exclusively to them. In legal development, professional and judicial ideals of social and legal order are the elements of the most enduring effect. They are traditional faiths and beliefs expressing the want of general security. The legal order is not a simple rational thing—it is a complex process in which new materials, now cautiously, now boldly, are created when the old ones fail us, and they are molded in the form of the traditional faiths and modes of thought of the art in which lawyers have been trained and judges have exercised their discretions.

Next I should like to suggest that we often use the terms "harmonization" and "unification" of law indiscriminately. They refer in fact to different conceptions.

Unification refers to the establishment of a uniform law or laws for a certain area of territories or countries. Generally, unification involves a forced imposition on a country of the law of another (for instance, in the case of a country importing its law into a colony), or a deliberate reception or copying of the law of a country by another. In rare instances, international conventions may establish a uniform law on a particular subject involving especially administrative questions or a new field.

Harmonization of law involves a search for uniform solutions of specific international problems transcending national territories. It is a seeking for approximation of law where uniformity of legal solutions is brought about through a slow and gradual process and in a spontaneous way on the basis of recommendations and directives

internationally agreed upon.

The International Convention for the Protection of Industrial Property of 1883 is a perfect illustration of harmonization of law. It establishes primarily principles such as the national treatment clause, or provides for specific legal rights, such as, for instance, the famous right of priority for foreign applications, and further incorporates directives for the creation and maintenance of national law deemed necessary by the sheer fact that rights of industrial property transcend national territories. The Convention has brought about changes of national law in conformity with its principles and stipulations.

It is clear from the experience of this Convention and its successive revisions over 85 years that general unification of industrial property law is a dream. Already in 1878 when the first project of the Convention was being discussed, the eminent French jurist Lyon-Caen expressed this view:

> We must not hope, in the present state of things, to arrive at laws of industrial property common to all countries. This would be utopia. What makes this impossible is that industrial property laws are clearly tied up with civil law, civil procedure, commercial law, penal law and penal procedure. It would then be necessary that all these branches of law be unified if we are to have a uniform law on industrial property, and this is impossible.

Lyon-Caen was talking at a time when in many countries industrial property law was still in its infancy and when the elements of law, other than legislative texts, such as court decisions, traditional techniques and political ideas and economic factors, did not play such a major part in the composition of law. Today unification is even more of a distant dream except in the case of political-economic integration.

A good example of this is the very important uniformity of law carried out by the Nordic Council since 1950. The four countries have now what is, for practical purposes, Uniform Acts on trademarks since 1960-1963 and more recently a Uniform Act on patents. The experience with the trademark law decidedly shows that the uniformity of the text is not enough. The application of the Uniform Acts already differs markedly in the four countries.

Even harmonization has to be viewed realistically. The trend toward viewing "harmonization" as a good thing no matter what the problems are, as an end in itself, is subject to a fair degree of qualification. In certain areas it may be simply undesirable or impracticable from a country's national point of view, since the concessions that would have to be made to achieve agreement may not be worth it.

The experiences with the successive revisions of the International Convention for the Protection of Industrial Property are quite instruc-

tive. Amendments of the Convention embodying harmonization on new points of law or procedure have been successfully carried out when two factors were present:

(1) A real practical interest of removing serious or unreasonable obstacles to international trade;

(2) A sufficiently close similarity of law in the various countries so that this could be stabilized for the future and ensure certainty.

A study of the minutes of the Conferences of Revision of the Convention is full of scores of examples where proposed amendments failed because countries denied the existence of one or the other of the above factors.

Whilst an identity between certain basic concepts underlying the law of industrial property may be said to exist so as to warrant an attempt at harmonization or partial unification, significant divergencies nevertheless remain and should not be underestimated. These divergencies are due to many factors: historical development, legal traditions, administrative theories of government, economic philosophy, and others. The preparation of Model Laws on Patents and Trademarks for the developing countries represent a laudable effort and a hopeful academic exercise, but there is considerable doubt that it may result in adoption by any country.

I submit that rather than seek to bring about uniformity of law, we should be more concerned to maintain a largely existing uniformity of law in a group of countries. We have such cases.

One example is the unitary laws on Patents, Designs and Trademarks adopted by the African and Malagasy Organization which includes 13 new independent African States, formerly French colonies. The French industrial property laws extended fully to all its colonies. and possessions before independence, so that the States of the African and Malagasy Organization already had a uniform law, the French law, at the time of their independence. What they did, then, was to maintain this uniformity by adopting those unitary laws which are basically the former French laws. Still this was duly inspired and organized by France and it is a very remarkable example of Gaullist positivist policy.

A far more striking situation is that of the territories which formerly constituted the British Empire, and in which there has been uniformity of industrial property law. This is a tremendously large part of the world. It comprises today nearly 40 independent States and 25 dependencies, with a total of almost a billion people, or one-third of the world.

It is well known that the British laws on the various branches of

industrial property have either been introduced by Great Britain in these territories or have been adopted by them. And I mean by law not only the legislative Acts or Ordinances or Rules, but also the other elements of law: court decisions, traditional techniques and a body of philosophical, political and ethical ideas as to the end of the law of industrial property.

This is a branch of law where the applicability of the original British law to the political and social conditions of the recipient countries after independence did not raise any major difficulty. The case is analogous to the situation in the United States in the post-Revolution era, on the issue whether the U. S. should retain the common law of England in view of the political bitterness and hostility to things English. Our jurists then were able to resolve the problem by the creative use of comparative law, and by considering English law as a body of universal principles sanctioned by experience and by the reason of mankind.

The new independent States consider the British industrial property law they received or adopted as a sound and practical body of law for the reconciliation and satisfaction of conflicting interests, claims and demands. This view has acquired a certain fixity in their judicial and administrative tradition, and it reflects their own philosophical, political and ethical ideas on the national as well as the international level. A clear evidence of the latter is the fact that all of the countries of the British Empire which were included in the past in the territory of the Industrial Property Union have reconfirmed this by adhering formally as members of such Union.

As a student of law and as one who has been engaged for nearly 40 years in the international protection of industrial property, I consider this uniformity of substantive law of industrial property in one-third of the world as one of the great blessings of international trade, and I would deem it a real tragedy for this uniformity to cease to exist.

The point I wish to make is that this uniformity of the law may gradually disappear. The institution which maintained unity in the law, the Judicial Committee of the Privy Council, does no longer exist for most of the independent States. The British had failed to make this a common tribunal by circulating it through the Commonwealth and changing its composition so that it could have an inter-Commonwealth membership. There is no conscious effort today whatever to keep development and evolution of the law as uniform as possible in this large segment of the world.

There have been historically only two technical conferences among British law countries on the industrial property law. One in London in

1922 specifically concerned the patent protection throughout the Empire. It was then noted that the patent legislation was pretty much alike in all of the British Empire and yet one had to apply separately in each dominion, colony or possession for a separate patent, and that it took in fact 46 applications to obtain patent protection for an invention for the whole Empire. Many proposals for creating a single patent effective for the whole Empire were made. All of these were rejected, which is remarkable bearing in mind that colonial officials represented each territory. It was unanimously agreed that "the right possessed by the United Kingdom, the autonomous colonies and dominions, to grant patents in conformity with the laws of their own countries is to be maintained integrally." It was thought desirable to have a central office for examination of patent applications but even this was thought to be beset with difficulties. The conclusion then was to adopt the principle of registration in the colonies of issued patents of the United Kingdom, subject always to a colony or dominion having the right to refuse if the invention was covered by a previous local patent or was published or used in the colony or dominion.

The other Conference on the subject of both patents and trademarks was held in Canberra, Australia, in 1955 between representatives of the then Commonwealth members: Australia, Canada, India, New Zealand, Pakistan, Rhodesian Federation, South Africa and the United Kingdom. This Conference reviewed the position on patents and trademarks since the London meeting of 1922. The discussion bore on procedural questions and formalities, because it was in this respect that the legal systems then differed. A resolution was adopted to adhere to the Council of Europe Convention on patent formalities. Also, it was resolved that the Patent Office of each member of the Commonwealth should have the right to require the applicant to furnish the results of examination in the other members. With respect to trademarks, discussion was had on adoption of a Commonwealth Convention on formalities of application but it was concluded that this was not really necessary. The question of adherence to the Madrid Arrangement or of an inter-Commonwealth registration of trademarks was discussed and the suggestions were discarded. Only on the adoption of the International Classification of Trademarks was there agreement.

Both meetings made it rather clear that questions of administration and procedure do not lend themselves easily to uniformity. The important problem, of course, is the uniformity of substantive law in these States. Already signs appear of departures by individual States from the existing uniformity. India is about to adopt a new patent law

with important divergencies. Australia is adopting the deferred examination system on patents and other changes. The East African States of Kenya, Uganda and Tanzania are preparing a new patent law.

It is not suggested that the law in the new independent States of the former British Empire could or should be frozen. Just as Great Britain itself may change its law, so can these other States. Indeed, there is now in several of these States an explosive combination of traditional conservatism and revolutionary ideas engendered by collision with alien industrial societies and their techniques and ideas. Experiments to meet the needs of developing countries or reflecting new ideas or tendencies manifested in both developed and developing countries are inevitable.

What we are hoping for is not that there be no change of law, but rather that proposed changes may be discussed at technical conferences by government and private experts of this one-third of the world, with a conscious effort to reach agreements, so that the basic uniformity of the industrial property law may be maintained as far as possible.

I have discussed this with professional organizations and administertive officials in Pakistan, India, New Zealand, Australia, Kenya and South Africa, and I had a decidedly favorable response. I have discussed it also with the British but they will not probably take the initiative for such efforts for obvious political-psychological reasons.

My submission today is that the United States acting through competent private organizations and with the aid of our government, may take the initiative to promote the maintenance of the uniformity of law in the countries of the former British Empire. We may do so because there is great affinity between our substantive law and the British law, and we may have an influence on the new States and new tendencies in legal development because we have through the years generated a sufficiently flexible jurisprudence and practice to meet the changing conditions of our society.

I consider this a subject of transcending importance. It would be of paramount interest for our national and private enterprises to prevent this large segment of the world from going the way Spanish America has gone. Here also, industrial property law, like commercial law in general, has been received from the old mother country, Spain, but no effort has been made to retain uniformity of the law, and there is now a very large disconformity of substantive as well as procedural law. With the Common Market in Central America and the prospective Latin American Common Market, a real effort could be made for a return to a certain degree of uniformity of industrial property law.

Here again our professional organizations and government assistance

may be directed toward fruitful efforts.

Much of the interest in industrial property law in recent times has been aroused by the insistent demand of developing countries for the transfer to them of technology to speed up their industrialization. Indeed, for some time past, this transfer of technology has assumed an aura of fascination for such countries which saw in it a magical factor that would resolve or bridge over the difficult initial steps of technical and economic development.

The subject has been under intense study and promotion by several agencies of the United Nations, particularly the Committee on the Application of Science and Technology for the Benefit of Less Developed Areas. An immense amount of scientific and technical advice and assistance has been made available to developing countries. It is a multi-faced problem which I have tried to view as a whole in a Report I prepared for UNIDO.

However, it has been realized that absorbing modern technology is a complex social problem with many phases related to political factors, capital resources, psychological problems, and particularly education. In any case, a transition period is required for setting up the underpinnings of industrialized society: roads, railroads, power and water supplies, communication networks, et cetera.

As a more pragmatic view has been taken of industrialization and economic development, large and spectacular projects have been laid aside and modest realizable plans have been substituted. Attention has been turned particularly to agriculture where productivity in recent years has increased twice as rapidly as in manufacturing; also, to processing of local raw materials and to increasing exports of processed or semi-processed goods.

Still, it is realized that in the near future developing countries will need operative technology which is in the possession of private enterprise. These countries are handicapped by an unfavorable bargaining position with regard to the acquisition of such technology for various reasons among which political and psychological factors are not the least.

There is substantial evidence, however, that these factors are now of lesser importance than a few years ago. There is a greater inducement to look at developing countries as virgin territories where the pioneering spirit of the hardy industrialist and the bold enterpriser may sow new technology and reap an abundant harvest. And then there is now the emergence of the international corporations spreading the process of internationalization of production by using the local advantages of developing countries in lower costs, proximity of raw materials,

abundance of labor, et cetera.

Fears of economic colonialism are subsiding and on the other hand private enterprise is less reluctant to accept some government intervention and control, since this is practiced even in highly developed countries although in differing subtle ways. The basic issue is that private enterprise must make the ultimate business decisions as to the investment needed and the particular industry to be established.

All of this applies to transfer of technology in the broadest sense and particularly to unpatented technology. There is, however, a special problem to consider with respect to patented technology and its importation into developing countries.

A great deal is being said about the need of developing countries to create and maintain a good system of industrial property law in order to encourage the importation of patented technology. This is somewhat confusing. There are adequate laws of industrial property in the vast majority of developing countries. In fact, the grant and protection of patents to foreigners under these laws is particularly advantageous. There is very little or no examination. There is no obligation to work the patent locally in many of these countries and there are no annuities payable during the life of the patent. And yet people do not apply for patents.

Only in four large countries which are already in a surge of development are there more than 5000 applications for patents filed annually: Argentina, Brazil, India and Mexico. There are a dozen developing countries in which more than 1000 are filed and 16 in which the filings are between 100 and 1000. In 12 such countries, less than 100 are filed and in some, less than 10.

Why this? Because there are very few inventions developed by nationals, and foreigners do not file because they find no advantage to do so. There may be no local industry to use the invention or local market for its products. Exploitation of an invention requires a mass of ancillary technology in order to transform an idea into a marketable commodity. The few patents taken out are usually for inventions which require a small investment to be made locally, or where the patentee wishes to protect himself against unauthorized importation from third countries. In all other cases the foreign patentee is satisfied to obtain patents in countries which are capable of manufacturing the invention locally.

And yet it is to the interest of developing countries to have foreigners apply for patents. With a local patent and the umbrella that this provides, the foreigner may be more easily induced to invest directly or through a licensee in a new industry. The foreign patentee

generally also possesses practical technology and know-how relating to the patent which he will import into the developing country.

Patents are granted on a national level only, and to obtain a patent for each developing country, the foreigner must file application in each such country. Due to this, there has been talk of a universal patent so that an American, for instance, may obtain a patent which automatically would cover the whole world. This sounds exciting but close study proves it a dream if not a nightmare. For one thing, such a worldwide monopoly cannot be supported morally or philosophically. For another, a universal patent cannot really be understood without a largely unified patent law throughout the world. A universal patent would be disastrous for developing countries. It would burden their economy with an insufferable mass of industrial monopolies, stifling any hope for national industry and adaptation of technology. Highly industrialized countries may partly shake off this burden by the procedures of examination, opposition or invalidation and also by competitive research for alternatives and improvements. The developing countries would be wholly unable to defend themselves. If the colonial administrators of the British Empire in 1922 refused to accept the idea of a United Kingdom patent extending to the whole British Empire, it is futile to expect that the governments of independent developing countries will cherish the idea of a universal patent.

Their problem is to increase their chances of obtaining the benefit of importation of patented technology and ancillary practical know-how, and also of the adaptation of such technology by its adjustment to their local needs and conditions. Advances in industrialized countries are proceeding so rapidly that many of the current products and processes become obsolete in five to ten years. This discourages patenting an invention in a country where local manufacture cannot be realized in this short period. Then developing countries are handicapped by their inability to realize the value to them of particular patented inventions. The number and variety of processes from which to choose exceed the possibilities of evaluation and analysis available to most developing countries.

Ways must be found for exploration of what may be usefully transferred and for mastering the enormous mass of technical information available for developing countries. Several suggestions have been made for international or regional organizations to collect, classify and distribute the information on new patented technology. These may be worthy of attention but generally seem plagued by the problems of unwieldy international bureaucracy. On the other hand, the organization of regional Patent Offices for the grant of patents effective for a

number of States politically or economically associated may increase the interest of foreign patentees to apply for patent protection and import this patent technology.

In the long run, the realistic approach is to rely on the self-interest of private enterprise and on profit as the most powerful economic motive, to explore and identify those patents most suitable for use in developing countries with or without adaptation and adjustment to local needs and conditions. This self-interest and profit motive will be greatly promoted by the creation in all developing countries of a new kind of patent—Patent of Introduction of Industry—an improved kind of the system of confirmation or importation patents now available in some countries.

At my suggestion, recommendation for such a patent was made as an Annex to the Model Patent Law prepared by BIRPI, but I would submit improved features for it:

(1) It should be available to the owner of a foreign patent provided he applies in the developing country within five years from the grant of his foreign patent.

(2) If the foreign patentee fails to apply within the said period, then any other person may so apply on the basis of an outstanding foreign patent.

(3) The first essential requirement for the grant of such patent should be that the subject matter has not been manufactured in the developing country. Publication alone should not be a bar.

(4) The application for such a patent should be published and be open to third party opposition.

(5) The second essential requirement should be that the invention covered by the Patent of Introduction must be manufactured in the country within a period of two years from grant. In the case of unjustified failure of such working, the patent would be forfeited.

(6) Until the invention was actually manufactured in the country, the Patent of Introduction would not prevent importation of the subject matter.

(7) The Patent of Introduction should endure for the unexpired term of a foreign patent with a minimum term of ten years.

It will be noted that the proposed system would give the right to a Patent of Introduction primarily to the owner of the foreign patent, and would give him a period of five years within which to decide to ask for such. He would only run the risk that someone else in the meantime might start local manufacture in the country which would prevent his being able to get a patent. The foreign patentee, during this period, would presumably work his patent in his home country or in

other countries. If he found it practicable and profitable, there would be greater chances of his wishing to import the technology to developing countries by obtaining a Patent of Introduction. If the foreign patentee fails to apply within the period of five years, anyone else may do so, and particularly a local enterprise, and thus have the benefit of the patent to support the investment of a new industry. Such third party might then make appropriate arrangements with the owner of the foreign patent.

It is submitted that this is a practical means for encouraging the importation of patented technology in developing countries. It proceeds from the basic concept that creation of industry and local manufacture is the essential object, and everything must be done to encourage this. No undue monopoly is granted because importation is permitted until local manufacture begins, and because the patent is forfeited if no local manufacture starts.

May I now conclude with a final observation. The peoples of the earth differ widely in physical resources or tangible things. But for thousands of years, particular kinds of goods have moved from regions of relative abundance to regions of relative scarcity. We also rely on human resources. These are dynamic in character and respond more readily to human wants or social objectives. Today, international production of goods has come to be a primary means by which the activities of one area respond to the demands of another. Thus, international trade has the attributes of historical persistence and the quality of future permanence. The strains and upheavals of the times are not the expression of some immutable law of life. Although it ebbs and flows with small advances and spectacular setbacks, the broad direction of our world is unmistakable—a huge adjustment of human relations on a worldwide basis and a limitless need for reaching out to every corner of the world for its unique contributions.

We in America, particularly, who pride ourselves for the achievements of our age, cannot be its prisoners. We rely on our scientists and technicians to lead us in the ceaseless adventure of man in widening the boundaries of knowledge and, in the process, changing human life for the whole world. We are indeed an inseparable part of the world. We do realize that a prosperous Africa, an Asia with a higher standard of living, and a Latin Americа with a wider diffusion of purchasing power, are an indispensable requirement in the context of our enduring national interest and welfare.

Thus we shall meet the challenge of our times and endow our affluence and power with a spiritual quality. (Applause)

Friday, June 21, 1968

THIRD SESSION

Toward the Improvement of International Arrangements for Industrial Property

DIRECTOR L. JAMES HARRIS: Good morning, Ladies and Gentlemen. This is the Third Session of the Twelfth Annual Public Conference of The PTC Research Institute.

The Moderator-Commentator for the Third Session of this Conference is a highly regarded patent attorney, specializing in foreign patents and a partner in the firm of Langner, Parry, Card and Langner. The session he will preside over will be primarily directed to the role of industrial property in the transfer of technical information from one country to another for economic advancement. This session merits your serious attention, in view of the international action

advocated in Recommendation XXXV of the *Report of the President's Commission on the Patent System,* the proposed PCT Treaty and WIPO, recent reports by UNIDO and OECD, the alleged technological "gap" and "brain-drain," and the gold flow problem.

Our Research Staff is particularly interested in the views of this distinguished and representative panel for guidance in the future research of the Institute in the international area. It gives me great pleasure to introduce the Moderator-Commentator, S. Delvalle Goldsmith. (Applause)

MODERATOR-COMMENTATOR GOLDSMITH: Thank you very much, Professor Harris.

Good morning one and all at this fairly early hour. As they already said in the sessions yesterday, thank you all for coming to Washington. As Professor Harris said, our specific topic is toward the improvement of international arrangements and I hope that we will come up with some ideas for improvements. But even if we don't, we may come up with some ideas for future lines of research for The PTC Research Institute. Professor Harris told me very specifically that this is one of the functions of Conferences like this: not only for the education, and perhaps to some slight extent entertainment, of the audience and of the speakers and discussants and myself, certainly, but also to highlight fields or areas in which research, further facts, further data are required.

I was not able to be present at all the sessions yesterday, but I know in the morning there were very interesting reports of the research results of the Institute in connection with many facets of the U.S. Patent Reform Act. They have done an excellent job by questionnaires, by study, and I think that is all to be published in *IDEA* in the near future.

We have had a lot of discussions about these international arrangements, but perhaps we haven't as many facts about them as we have had about the U.S. Patent Reform Act. Of course, this is only natural because here in the United States certainly the factor which is more important for us is our own Patent Act rather than international arrangements and patent laws of other countries, although we are becoming more and more oriented in the direction of international activity in the industrial property field.

The specific topic of our session today, as Professor Harris said, is "Toward the Improvement of International Arrangements for Indus-

trial Property." I think that the key word in this topic heading is the word "arrangements" in the plural. In our various associations and committees, there have been all sorts of discussions about individual international arrangements, such as PCT, the Patent Cooperation Treaty, such as WIPO, the proposed World Intellectual Property Organization, discussions about the efforts toward a Nordic patent covering the Scandinavian countries and to the common patent that is already issued by the African Malagasy Union. These international arrangements are usually discussed and handled separately as separate items.

I think at this Conference we will have an opportunity to discuss them in more of a unitary fashion, and I think that may be helpful because, after all, there is an interrelation and an interaction, I believe, among all of these international arrangements.

I will just make one caveat, that in discussing all of these new international arrangements we should not forget the oldest and what may be the most important international arrangement of all the field of industrial property, and that is our good old friend, the Paris Union or the so-called International Convention of 1883 which has been going strong in an improved and revised fashion ever since then.

Now Professor Harris also mentioned that we would be talking at this session about gaps, gapology, about technological gaps, about brain-drain, and also about management gaps. Last night, if you were here when my friend and partner, Stephen Ladas, received the Kettering Award, you may recall that he said something along the following lines. It is maybe not an exact quotation, but it is more than a paraphrase. He said, "Failure to extend the benefits of science and technology to large parts of the world is not only morally wrong, but economically wrong." He said, "Prosperity, like peace, is indivisible."

Another author (John Donne) put it in a slightly different way when he said, "No man is an island entire of himself. . . . Therefore, never send to know for whom the bell tolls; it tolls for thee."

So I think that Steve Ladas' address brought in the higher and more general aspects of industrial property. I think we should keep these in mind; that it is more than a mere question of transferring technology from one country to another, but it has an important bearing on our future on this planet and world peace and prosperity

Now just a few words to the format of our session this morning. We have not too much time. The session is supposed to close at one o'clock and I think that, if I don't close it at or about that time, there will be a lot of hungry people leaving me anyway.

Although I am afraid my remarks have gotten a little extensive, now I will see how things go with the various speakers and discussants, and, if I find we are running behind, I will really put the clamp on my further remarks and do little more than introduce the speakers.

The general format will be the announced speakers on the various topics and I think they will talk for maybe 15 or 20 minutes each, and then we will have the announced discussant for each of the speakers, and the discussant will really not have to cover the whole ground. But I think I would like the discussant to highlight the important remarks made by the speakers and particularly in the areas which are controversial, so there will be an opportunity for general panel discussion later on.

As the session proceeds, if anybody has any questions, please write them down and get them up here in one way or another. I am afraid we don't have senatorial pages or messenger service, but we will be able to get them. Then, at the end of the announced speakers and discussants, I will read the questions and hand them to "volunteers" on our panel. I hope that we will be able to finish up with the announced speakers and discussants in time to have maybe three quarters of an hour or an hour of general discussion in which we will all join.

Now, I think we can get to the start of the actual meeting. In arranging the program I didn't have too much regard for the printed order, but I thought we would start on a truly international basis and with a man who has had a tremendous amount of experience in the international field. This is a man who holds a high national office in the United States in the field of industrial property and yet he is dedicated to the spirit of international cooperation as emphasized by Steve Ladas in his speech last night. This is, of course, our own Commissioner of Patents, the Honorable Edward J. Brenner.

In addition to providing a very efficient administration of the Patent Office, Ed Brenner has been official United States delegate to many meetings in connection with the Paris Union, in connection with the PCT and in connection with WIPO. He was, I believe, on the committee of the Paris Union which directed BIRPI, the Secretariat of that Union to prepare the original draft of the PCT, the Patent Cooperation Treaty. We have just learned that he will be going over to Geneva again very soon to work with BIRPI on a revised draft of that Treaty which should be available to us soon. So I think we can make a very good beginning in our activity this morning by turning the meeting over to Commissioner Brenner. (Applause)

PCT*

EDWARD J. BRENNER

SUMMARY

Within the next month the quest for international cooperation in the patent field will have passed another milestone. A revised draft of the Patent Cooperation Treaty will be released by BIRPI, and with it the hope renewed that *one* solution to the problems in international patents will be within our reach.

International filing has spiraled. When the widely varying patent laws and procedures are taken into account, it can readily be ascertained that, generally speaking, the manpower available internationally to process this flood of applications cannot possibly stay abreast, much less make any inroads in present backlogs. In addition—when an inventor who seeks protection in, say, ten countries is not only faced with ten different patent laws but also has to contend with ten different sets of formal requirements, the dilemma becomes almost insurmountable.

The first underlying principle of this agreement is to simplify an applicant's attainment of international protection of his invention. The Treaty should enable applicants to *defer* the substantial expenditures involved in multiple translation, prosecution and other aspects of foreign filing practice until they have an opportunity to evaluate the inventions in the light of the best possible prior art and with a clearer view of their commercial value in international markets. An equally important second objective is the reduction of the burdening overload on patent offices which is largely caused by the multiple repetition of searches and examinations of pluralities of applications on the same invention filed in several countries. The Treaty should therefore eliminate divergencies in national patent systems regarding formal requirements. This can be achieved without attempting to harmonize points of substantive patent law at this time. The Treaty should also provide for some form of preliminary examination report for those countries and those applicants which desire the benefits of such a report.

* (Proposed) Patent Cooperation Treaty

As a final consideration, the Treaty should serve as a focal point in the attempts to strengthen and improve the patent systems throughout the world.

Thank you very much, Del, and good morning, Ladies and Gentlemen.

It may appear moot to talk about the PCT as we now understand it in face of the fact that a new draft will be publicly released by the end of July. However, the underlying principles are largely the same as they have been and the development from the inception of international patent cooperation to the point of an actual treaty draft is both valid and noteworthy.

The underlying problems, and chiefly those generated by the onslaught of multiple filings for the same invention throughout the world, are well known to this audience. Much has been said and written about them. The consenus that a solution is needed has been voiced not only by Patent Office officials throughout the world but also by industry leaders, Bar groups and almost everyone else who is concerned about the well-being and effectiveness of our patent system. Moreover, if present trends are left to continue and an attitude of "wait and see" were to prevail, it can be predicted that within the not too distant future any system based on examination will become less and less effective.

The essence of a strong and efficacious patent system is to give proper protection to the inventor and to disseminate each technical advancement in the shortest possible time. In this era of galloping advances in technology, where it is not unusual for an invention to be obsolete almost before it gets off the drawing board, neither objective can afford to wait years for multiple worldwide decisions whether or not an invention is patentable.

International filing has spiraled. Of 88,000 applications filed in our Patent Office in 1967, nearly 23,000 formed the basis for some 115,000 foreign filings of U.S. origin. When the widely varying patent laws and procedures are taken into account, it can readily be ascertained that, generally speaking, the manpower available internationally to process this flood of applications cannot possibly stay abreast, much less make any inroads in present backlogs. In addition, when an inventor who seeks protection in, say, ten countries is not only faced with ten different patent laws but also has to contend with different sets of formal requirements, the dilemma becomes almost insurmountable.

And thus the search for a solution was started. Several years of study

led to the release by the International Bureau for the Protection of Industrial Property of the first plan for a Patent Cooperation Treaty in May of 1967. A meeting of a Committee of Experts to consider the proposal was held in Geneva in October of 1967.

Thereafter, a Working Group was convened in March of 1968 to consider the subject of searching under the PCT. This latter meeting was of particular importance because not only the interested countries in the form of governmental participants were present, but also interested and concerned non-governmental organizations, such as EIRMA, AIPPI, NAM, and FICPI contributed to guide the Treaty along the road of development.

Numerous other meetings, private and governmental were held. Finally, taking into account all suggestions received from many interested groups, BIRPI went to work again to produce a second draft of the Treaty. The new draft, when publicly released next month, will again be subject to careful scrutiny. A meeting of a Committee of Experts has been scheduled in Geneva in December to consider the Treaty in general and to further shape its development keeping in mind the needs for both government and the private sector.

Before we look at the Treaty itself, I would like to mention the broad objectives and purposes that are its very foundation.

The first underlying principle of this agreement is to simplify an applicant's attainment of international protection of his invention.

To give you just one example of the present problem, I would like to quote from a speech given by P. A. Gorman, President of Western Electric on March 18, 1968, to a meeting of the NAM's Patent Committee:

> Western Electric handles all the foreign patenting for all the Bell System, in addition to our own domestic patenting. Currently, the Bell System has almost 9,000 patents in the United States, and more than 10,000 in foreign countries.
>
> Now, using just one year as an example, this involves some 2,500 patent applications. Of these, about 70 percent are duplicates filed in patent offices outside the United States. It takes an organization of 18 full-time professionals in our company to oversee this foreign operation. We also hire the services of patent agents in foreign countries to submit and prosecute our cases in full compliance with local practice. The cost of this foreign patent operation is now running close to $2 million a year.
>
> Under the present system, if applications are to be filed on an invention in a dozen or more countries . . . and some cases we file in as many as 34 . . . we face a dozen absolute deadlines that must be met. In each of these countries, we must comply with the various formalities required and, in many cases, supply translations. All of this must be done within 12 months after filing the United States application.

It is imperative therefore, that the Treaty should enable applicants to *defer* the substantial expenditures involved in multiple translation, prosecution and other aspects of foreign filing practice until they have had an opportunity to evaluate the inventions in the light of the best possible prior art and with a clearer view of their commercial value in international markets.

An equally important second objective is the reduction of the burdening overload on patent offices which is largely caused by the multiple repetition of searches and examinations of pluralities of applications on the same invention filed in several countries.

A constant source of frustration is the widely varying range of examining procedures and formal requirements with which the applicant is beset if he desires international protection.

To quote Mr. Gorman once again:

> Of the dozen countries we file in, at least six or seven will have a patent examining procedure. Although it is now possible to defer examination in a few countries, we continue to find ourselves dealing with several examination processes at the same time . . . each of them starting essentially from scratch.
>
> In 1957, for example, we filed on an invention for programmed control of telephone switching. This represented a major technological breakthrough. Since then, we have spent many thousands of dollars and many hours of legal work to protect that one invention. Today, more than ten years later, we still haven't gotten all the patents.

The Treaty should therefore eliminate divergencies in national patent systems regarding formal requirements. This can be achieved without attempting to harmonize points of substantive patent law at this time.

The Treaty should also provide some form of preliminary examination report for those countries and those applicants which desire the benefits of such a report.

As a final consideration, the Treaty should serve as a focal point in the attempts to strengthen and improve the patent systems throughout the world.

These then are the basic underlying principles, considerations and reasons for the need of the Patent Cooperation Treaty. I would like to emphasize that the enactment of the Treaty will not immediately assure that all objectives will be met at once. Just because everybody cannot be satisfied on all counts does not mean that this Treaty is not worthwhile.

Other alternatives were considered, but the Treaty is the best solution to date and its forward momentum should not be slowed down in order to further study the problems. The time to just

deliberate has passed and the time to implement a *worthwhile* solution has arrived.

BIRPI's development and release of the original draft was a significant step in the right direction and the fact that all these meetings of Experts and Consultants have been held and that all their opinions, suggestions and recommendations have been channeled to create a second draft of the Treaty is another giant step toward the final goal.

Keeping all this in mind, I would now like to touch on the major points of the Treaty itself. In a nutshell, the Treaty provides a set of uniform requirements for international patent applications to result in a common search report for use in the granting of national patents by the signatory countries.

This is known as Chapter I of the Treaty. Optionally, applicants and signatory countries for that matter could also participate in Chapter II which would produce an international preliminary examination report. This feature would afford the applicant, and subsequently the countries in which the applicant elected to seek patent protection, substantial assistance in determining whether the claimed invention is patentable.

There are two alternative ways in which an applicant can enter the international system. The first is by filing an international application under the Treaty as a first-filed application. This would not be an application claiming priority of a national case, but rather a single international application in which the applicant would elect his own country, as well as other countries in which he seeks patent protection.

For several reasons, the most important of which is timing, we do not believe that most U.S. applicants would follow this route. They would rather, we think, file a regular U.S. application followed by an international application within the priority year. This is the second basic method of entering the international system. It goes without saying that by this second route the applicant is guaranteed the full benefit of the year's priority to which he is entitled by virtue of the Paris Convention.

Following this second route, the applicant normally would have two cases, the regular U.S. application and the international application containing an election of countries of interest to the applicant. I would like to emphasize, however, that although for each applicant this situation involves the filing of both a national and an international application, we have every reason to expect that we will be able to operate in a way in which it normally will only be necessary for applicant to submit a single copy of his specification and drawings

which will serve both purposes.

For U.S. applicants, Chapter I would thus involve the initial filing of a regular U.S. application accompanied by the regular U.S. filing fee. Under normal conditions, the applicant would submit a Request for international treatment within 12 months of his original filing date.

This would give rise to the inception of the international application in the English language. Its content would consist of an abstract, a description of the invention, drawings, and claims. However, copies of the specification and drawings of the U.S. case normally could be made by the Patent Office to provide the necessary copies for international purposes.

A transmittal fee and an international search fee, both of which would be determined by the U.S. Patent Office, as well as an international fee for the International Bureau would complete the package. After performing any necessary security review as well as a check for formal defects, the record copy of the international application would be forwarded by the U.S. Patent Office to the International Bureau in Geneva generally by the end of the thirteenth month.

Between the thirteenth and fifteenth month, an international search report would be prepared and forwarded by the U.S. Patent Office to the applicant and the International Bureau. The international search, by the way, may be quite different from a national search in a number of respects. It will be a better search for the applicant. The Examiner will not stop searching when he finds a pertinent reference but will continue to search until the documentation called for in a particular application is exhausted.

It is our plan within the next several years to change operations in the U.S. Patent Office to provide a PCT-type search for all U.S. applications as well as international applications.

In order to amend his application and reconsider the original designation of countries, two months, the sixteenth and seventeenth month, would be set aside for such actions by the applicant. The amendment and final designation of countries would then be submitted to the International Bureau which would promptly communicate the amended international application together with the search report to the offices of each of the designated states.

At that time, the international application would assume in each designated state the identity of a regular national application, effective as of its international filing date and subject to the later submission of translations and payment of national fees. Publication of the application together with the amendment and search report would occur at

the earliest date required by any designated country, but of course not earlier than the eighteenth month.

We anticipate that the applicant will have approximately 20 months under Chapter I and an additional five months under Chapter II to furnish the required national filing fees to the designated offices and to file translations where required.

Situations may arise where the normal time schedule will vary slightly. For example, in the event that an application is directed to more than one invention and compliance with the principle of unity of invention is required, the applicant would be given a period of two months in which to elect the invention he wants to prosecute, prior to the preparation of the international search report.

Another time variation would occur where the applicant wishes to prosecute his application more rapidly and thus files only an international application first, in the manner I have discussed previously. The U.S. Patent Office would then provide an international search report between the sixth and ninth month.

Chapter II of the Treaty, it is hoped, will be sufficiently attractive to applicants as well as patent offices to be worthwhile. In accordance with this section of the Treaty, at any time before the expiration of the time limit allowed for amending claims, an applicant could file a Demand for a preliminary examination report with a qualified examination authority.

This would generally be the same office that prepared the initial international search report. At the same time, the applicant would elect those countries in which he desires to use the report. A copy of the Demand would promptly be sent to the International Bureau which in turn would notify the elected countries.

An examination would be performed and would either result in a favorable report or a first opinion directed to rejected claims. In the latter instance, the applicant would be given some period of time, such as 60 days, to traverse or accept the opinion. A second opinion might be rendered and the report would normally be established and sent to the applicant around the twenty-third or twenty-fourth month.

The timing under Chapter II is of course greatly improved if the applicant presents a request for an international preliminary examination report at the time of the filing of his international application. In that case, the international search and examination could be "telescoped" and the issuance of the examination report accelerated.

In general, it can be seen, that although it may not be perfect, the PCT establishes a procedure by which an applicant can obtain international patenting on a simplified and streamlined basis. The advantages

are numerous. A simple international application of standard format can be filed and perfected in the English language through the stages of international search and examination.

At present, he must file separate applications in every country in which he seeks protection within 12 months of his original filing date in order to obtain the right of priority. Crucial and expensive decisions affecting his later rights throughout the world must thus be made in a relatively short and often insufficient time span.

Under the PCT procedure, applicants, in effect, gain about eight months in additional time under Chapter I in which to finalize their decisions regarding foreign filings and the commitment of substantial resources. Chapter II provides approximately five months of additional time. Thus, commitment of attorneys' fees, foreign national fees, translation costs, et cetera, can be soundly based on a reliable international search report under Chapter I, a preliminary examination report under Chapter II and the results of a U.S. search and examination, when the U.S. procedure is conducted prior to or parallel with the international operation. Moreover, under Chapter II, applicants will have documents reflecting patentability of their inventions which certainly should aid them substantially in national patenting and licensing procedures.

In closing, it is quite clear that the Treaty will not be the ultimate solution. The most important reason for this is the decision reached at the meeting in October of 1967, which was advocated by the practicing Patent Bar, that the Treaty should keep to an absolute minimum any changes in substantive patent laws. With this in mind, and in order to still achieve the maximum benefits for both applicants and patent offices, the Treaty is designed to reach as far as possible without requiring modifications of substantive patent laws.

There still are voices of dissent and calls for theoretical alternatives. But the choice today is whether to wait for the ultimate or to proceed on the basis of existing capabilities. We are convinced, and other countries as well as non-governmental interest groups fully share our view, that it is much more important to start with a good system and start with it *now,* rather than to conceive and propose alernatives which may exist in theory and may some day be attained, but are for all practical purposes impossible to realize in the foreseeable future.

Thank you very much. (Applause)

MODERATOR GOLDSMITH: Thank you very much, Mr. Brenner. I am sure you will all agree that Commissioner Brenner has given us an excellent general view of PCT and lots of meat for us to sink our teeth in during the general discussion which will follow.

Before the general discussion, however, we are going to have in accordance with our format, a specific discussant to talk about PCT. This is my good friend and severest critic, Eric Waters. He has had a long and successful career in the field of international patents and trademarks and his job, like my own, has been the protection of American industrial property rights abroad. That means protection of the rights that have brought in millions of dollars of royalties into the United States and at the same time brought United States technology to countries all over the world, both developing and developed countries.

So I believe that this activity of filing United States inventions abroad and protecting the United States rights abroad has two very important results: one benefiting us, and one benefiting the other countries, which in turn benefits us also.

Eric Waters is particularly fitted to discuss PCT because he has personal knowledge of the present problems in international filing to which the Commissioner has referred. Eric knows the backlogs that exist in the patent offices of the world, because he has filed cases where he waits for years before getting official actions. He knows about the duplicative work in the different foreign patent offices because he gets Actions from one country which cite the same references, the same prior art as Actions in another country. He knows of the current efforts to avoid this by the patent offices in one country asking for the examination results of the patent offices of other countries which has sometimes led to more complications and difficulties than the previous system. It is certainly the fact that, if each country holds off examination awaiting the results of examination in another country, this would mean more delays rather than less.

So I am delighted to introduce at this time Eric Waters who is a partner in the firm of Haseltine, Lake and Company. Although this firm, I believe, had a British origin, Eric, I think, you will agree is 100 percent American and as I have indicated above, his job is to be an advocate for American rights abroad. At this point I will present Eric Waters to discuss PCT. (Applause)

ERIC WATERS

Thank you, Del.

Ladies and Gentlemen, I am in a rather difficult position because I am asked to be a discussant on the remarks of my good friend, Ed Brenner, without ever having any idea of what he was going to say, although I can guess that he is rather in favor of this Patent Cooperation Treaty.

My position is that I cannot be wholly in favor of this Patent Cooperation Treaty. One of the difficulties is that it is not yet in any sort of final form, although we have been told that a final draft is being prepared and should be available in July. This final draft, as I understand, will be distributed fairly widely and an opportunity will be given to look at it thoroughly and discuss it among our various organizations. I would say that it deserves a great deal of looking at, studying, considering, from all aspects—not only the general principles, but if necessary and if the general principles are sound—to be looked at from the standpoint of details and how it will or could affect the protection of industrial property in the foreign countries.

I believe the main objects of the PCT as originally proposed were very good. The idea was to try to reduce duplication of the efforts of the various national patent offices in their searching and examination. This was the main thought behind the original suggestion.

I don't think that the original suggestion had in mind the formulation of a universal patent system or even an international filing. It was to reduce the backlog in the patent offices that the original proposals were made, namely, to reduce the duplication of the effort of examination.

The proposal was taken up and, frankly, I feel that the BIRPI organization in Geneva ran with the ball. They saw a great opportunity of trying to evolve a system which would possibly take the place of the existing method and procedure of filing independent applications which would be independently examined in each country. But they were faced to some degree with the demise or at least the falling asleep of the European Convention, which was proposed along the same lines, and realized the reason for this European patent convention going into limbo was that it disregarded educational interests and cut across the lines of substantive law in each national country.

BIRPI, in making its original proposal for the PCT draft, tried to avoid this by providing that national patent offices would continue,

that national patents would still remain in force, and that after an international filing to establish an internationl filing date, the procedure would be the same as it is now, that is, the prosecution would be in each of the national patent offices.

The ideals of this PCT are very evident and I think they are good ideals toward eliminating duplication. But in the preparation of the PCT I think that they forgot some of these ideals and came down to more basic issues of trying to get an international filing which would be acceptable in each country.

While an international filing may be a good idea, I believe it could only be done when there is a certain harmonization. Now if it is the purpose of PCT to work toward a harmonization of formalities, I have no objection and I think that it is a good thing. But I feel the real objective of trying to eliminate duplication in searching is not being realized in the way that the PCT has been discussed so far. There have been a number of meetings mainly on searching, although there has been one formality meeting (the second one having been cancelled). The manner of search and the type of search which has been made has been discussed very fully.

It has evolved, however, into a great deal of dissension as to what that search report should be, and it has boiled down to where the various participants in these meetings appear to want only a list of references without any discussions as to how these references would apply to the claims of a particular case or to the application itself.

In other words, the search report which would be made by any one of the recognized searching authorities would merely list the references which they found. I realize in making this statement I am not going into much of the details of how we go about getting this searching done. I take it that many of you gentlemen are familiar with the basic elements of the PCT.

However, if it comes to the matter of search reports being merely a list of references, then we do not need the PCT. We are already doing this in a number of countries. In the actual prosecution of cases in Sweden and Holland and one or two other countries, the patent offices are asking for a list of references, as shown from the search in the U. S. Patent Office, or any of the others. These are already supplied. It is easy enough to get the copy of the first U. S. action, which does give a list of references, and without making application of these to any particular claim or any part of the application. These are distributed and sent to the Patent Offices of other countries. Thus if we merely have a list of references, there is no need to have a rather complicated procedure for the PCT. You can have the examination made in one

country and send this list of references to another country.

This brings up the question of what advantage it would be to the U.S. Patent Office under the PCT to have an international application and to rely upon this list of references or even on a search report from another country. I have some difficulty in appreciating the benefits to the U. S. Patent Office, if it is a matter of reducing the backlog of U. S. applications, which I think was the original impetus behind the suggestion of a PCT.

I think Commissioner Brenner mentioned that possibly 27 percent of the applications filed in the United States Patent Office are of foreign origin. I take it that he feels that 27 percent would not need to be searched by the U. S. Examiners because the search report would already be supplied through the international application from one of the examining officers abroad. Thus there would be a reduction of 27 percent of the Examiner's time in connection with the prosecution of a U. S. application. However, if the only search report which is presented is from a foreign searching authority and filed with an international application for the United States, this is a mere list of references. It would only take the place of something I find comparable—the Classification Examiner's function, where he classifies the application into a certain class and possibly pulls out the references on that particular class.

But is this really a reduction in the function of the Examiner? I do not think it would be much of a reduction. It might be some. But the U. S. Examiner still has to search the U. S. part. He has to study it and he has to apply it to the particular case. A mere listing of references from abroad would be very little help and I think would mean a reduction of very little time for the U. S. Examiner. Certainly I don't believe that we can expect that 27 percent of his time is going to be saved. If it is as much as 5 percent it would be a lot. Therefore, we cannot expect, on this basis, that there is going to be much of a reduction in the backlog or much reduction in the U. S. Examiner's time by the PCT method of accepting a simple search report which would be only a list of references from abroad.

As one factor which has been taken up, I think the area where the PCT might have an advantage is a deferral of expenses or a deferral of consideration in filing for a foreign application. Commissioner Brenner mentioned this was one of the advantages that an applicant thinking of extending his protection to foreign countries would have—more time in which to consider, more time before a decision is made before application is filed.

This I agree with. There would be more time, but it is only a

deferral of expenses. It is not a reduction of expenses except on a very minor scale.

We have essentially two methods of filing which are suggested under the PCT. Let us take it from the U. S. applicant's standpoint—filing of the regular U. S. application and then at some time either simultaneously with the filing in the United States or within one year he requests that national filing be considered an international application.

This would establish an international filing date. A search is requested or is handled in the normal way by the U. S. Examiner so far as a U. S. application is concerned and this search may be extended to a so-called international phase. Within five or seven months afterwards, and this can be extended from the initial 12 months with a one-month period which is provided under the PCT proposal for establishing the international filing date, you could have from the 15th to the 17th month within which to complete a national application after receiving a search report.

This completion of a national application would then be done two ways, either by the national patent office filing the application of a foreign country and transmitting the papers, or by the applicant doing the same thing. Let me say this, it is very difficult for me to visualize that any company, an applicant, in considering foreign applications would be likely to entrust the filing of a foreign application entirely to a government bureau. I am not selecting the U. S. Patent Office as one of these, but I am thinking mainly of some of the patent offices abroad coming into the United States or taking filings in other countries. We know what bogging down happens. Those that have actually done it know what the difficulties are, what anxieties we have to see that things are done at the proper time or that the documents are complete.

The second method would be for the applicant himself to file the application and complete the papers. Now here is where the same thing is done as would be done initially or as would be done at the present time. You would file the formal documents, and the translation at that time, and as it is presently proposed it would be done as it is for a national filing through an associate abroad, so that rather than saving anything in that respect, it is merely a deferral.

However, we have here some figures which have been proposed and I must say that the fees under this PCT are somewhat tentative. But the present proposal appears to be that there would be a designation fee, possibly a small one, for each country selected. It could be from $5 to $30 (it has been referred to that way) or a small transmittal fee by the national patent office together with the present government fees as now existing or as increased from time to time as

we note. In addition there would be a search fee either by the home patent office or by the IIB which could vary between $5 and $150.

There has also been a suggestion that an international fee be paid in part to the designation to cover the administrative costs of BIRPI who will still be in the picture with respect to a credibility application which would also be transmitted either by the applicant or by the national patent office. An industry in a recent proposal in Geneva has proposed a $10 fee which would be submitted for the building up of a center.

I am somewhat in agreement with this last part. This essentially is what we should be working for, namely, to build up a centralized research center. They need money and they need the facilities to build it. So this idea, if there is an international application providing part of the fee to build up an international research center, might be a good one. However, here we have an international filing fee which could be between $5 and $30.

We have a transmittal fee of the national patent office which could be $5 to $10 but which is at the present time flexible. There are the administrative fees of BIRPI and these are the obvious fees which would be paid. But in addition to that we have certain hidden fees. The original proposal, you may recall, was that an international application be filed through BIRPI, but this has been pretty well discarded and the idea is that the international application would be filed through the national patent office.

Each national patent office must set up some formalities bureau. They would have to check an international application and they would have to take care of its transmittal. Even though this may be a clerical job, it is still another bureau.

I submit that this is a substitution of several bureaus in each national patent office instead of one bureau in BIRPI, so that we have a multiplicity of problems which would be raised as well as bureaucratic expense. Who is going to pay for this? How does this get paid?

Let us take the U. S. Patent Office. They must set up some separate little bureau on international applications for handling these things. I don't know to what extent this will be done but there are certain indications in appropriation statements that there must be between six and seven additional people. There must be some administrative head, and apart from the formalities there must be some reasonable professional examination to see if an international application as to form and substance is presented.

Are these included in the additional appropriation that has been suggested? I think that we will find that these hidden expenses will

result in either additional fees for an international application or that there are going to be additional appropriations requested or that the fees for U. S. patent applications themselves will be increased.

This matter of fees has not been thoroughly considered. It has been rather lightly passed over in all of the meetings that have come about. I submit when we come right down to it, the PCT is not going to be used if it is going to be more expensive and if there are no real advantages otherwise. There must be some very, very real advantage and not merely a deferral of expenses. The deferral of expenses is the happy factor in this PCT. I think that inasmuch as I have spoken a little too long, I will stop at this particular point. (Applause)

MODERATOR GOLDSMITH: Thank you very much, Eric. You certainly pointed up the fact that PCT is a rather controversial topic. I am sure we will be able to discuss it later on.

One part of PCT which I don't think is controversial is the basic objectives– (1) , to simplify international filing, the filing of corresponding applications in different countries, and (2), to reduce duplicative work in the patent offices of the world.

Certainly we must all get behind these objectives, but I think that is no reason why we should not discuss the way in which the draft of PCT proposes to attain these objectives: whether the way is correct and whether the way is efficient. This is what I think we should concentrate on.

As far as being a controversial topic, I am delighted to find there is a little bit of controversy between my views and the views of my good friend, Eric Waters, because I think that this business of exchanging examination results among patent offices is not very helpful. It leads to complications, whereas Eric seems to think this might be a good idea, so that we can discuss also.

I think what we really need to carry out the objectives of PCT is a good centralized search, truly centralized search, that can be the basic and possibly the only search for any application filed in any country which is a party to PCT and such a search could be carried out for example by the IIB—that is the Institute of the Hague, which already has a fairly large staff and facilities and expertise in examination, and where they know the different languages. They have the same documentation as the Dutch Patent Office. If we could really have a truly centralized search this would lead to advantages of computerized searches, and this could be an important field for research, not only on

an international level. Possibly this is a line of research which our own PTC Research Institute at George Washington could take up.

The only other comment I want to make at this time is that, when I introduced Commissioner Brenner, I said he was a very efficient administrator of the Patent Office and that he was also very internationally minded and had all these duties of attending the various meetings on international industrial property matters. At this point I wish to say, I think Commissioner Brenner is also very farsighted because he has told us even though we haven't got PCT yet, it has not been signed or ratified, that the U.S. Patent Office search is already being modified so that it will be a PCT-type search, and this is certainly looking ahead.

Now that we have covered this basic international activity of PCT, we will go on to some of the other international organizations and the speakers and the discussants for them. We have OAS, that is the Organization of American States, or perhaps it is PAU, the Pan American Union; possibly our speaker will clarify my mind on that point because I notice that their letterhead refers both to what I think is the old name, Pan American Union, and the current name of Organization of American States.

Next we have UNIDO, the United States Industrial Development Organization, and this will be very interesting I think, because we want to know what is happening in the UN, what the activity is there as regards industrial property.

Then finally we will have some reference to the EEC, the European Economic Community or the Common Market and what they have done in the industrial property field.

First, I have the pleasure and privilege of introducing a distinguished representative of the Organization of American States (OAS), Dr. Isidoro Zanotti, who is a Legal Adviser and acting chief of the Codification Division in the Department of Legal Affairs of that organization. Dr. Zanotti has practiced law in Brazil and has participated as a member of the OAS Secretariat in many conferences and meetings of that organization. He has written articles on international law and quite appropriately he has co-authored an OAS publication on Brazilian law. Dr. Zanotti will not only give us his views on OAS in connection with international arrangements, but perhaps some special insight into the problems of Brazil in this field. Therefore, I have pleasure in introducing Dr. Zanotti. (Applause)

OAS*

ISIDORO ZANOTTI

Thank you, Mr. Chairman. It is a great privilege and honor for me to be with you this morning. I would like to thank The Patent, Trademark, and Copyright Research Institute of The George Washington University for giving me the opportunity to be here.

At the very outset I would like to recognize the great cooperation that Francis Browne has given to the OAS. He has given us advice on many occasions. We are very thankful for his assistance on this complex matter.

Our topic concerns multilateral treaties and conventions. I will not treat now the interesting draft treaty that the Commissioner was talking about, but the actual law, the treaties and conventions, and I am going to mention here many instruments. I will refer to the conventions of an inter-American nature—I mean those conventions signed in the inter-American system on different occasions and those regional or subregional conventions signed among different groups of countries.

In the inter-American system we have been very much concerned with this matter of patents, trademarks and all this gamut of topics on industrial property. We have in the inter-American system nine countries which are members of the Paris Union. I am sure you know them: Argentina, Brazil, Cuba, Haiti, Dominican Republic, Mexico, Trinidad-Tobago, United States and Uruguay. These nine are members of the Paris Union. My own country was the first American country to join the Paris Union in 1884 and as you know, the United States joined the Paris Union in 1887.

Since the early stages of the development of the inter-American system several steps were taken to protect industrial property in the inter-American field. I am speaking here only of multilateral activities at the moment. As a result of this action six different conventions were signed.

The first was the treaty on patents of inventions, industrial drawings and models and trademarks, signed in Mexico City in 1902 during the Second International Conference of American States. As you can see,

---

* Organization of American States

we started quite a long time ago to deal on an inter-American basis with a view to getting something done on this matter.

In 1906 another convention was adopted on the occasion of the Third International Conference of American States held in Rio de Janeiro. In these first two instruments, we did follow the general ideas of the Paris Convention, that is, one convention to deal with all pertinent topics.

In 1910 we changed the trend somewhat. During the Fourth International Conference of American States held in Buenos Aires, two different conventions were signed, one on patents of inventions, designs and industrial models, and another on the protection of trademarks. The subjects were treated in separate conventions.

The 1910 convention on patents of invention, designs and industrial models is the latest inter-American instrument on the subject, and it is in force among the following countries: Bolivia, Brazil, Costa Rica, Cuba, Dominican Republic, Ecuador, Guatemala, Haiti, Honduras, Nicaragua, Panama, Paraguay, United States, and Uruguay.

This convention provides in Article II that the persons who obtain a patent of invention in any of the signatory States, enjoy in each of the other States all the advantages which the laws relative to patents of inventions, designs and industrial models concede. Consequently, they shall have the right to the same protection and identical legal remedies against any attack upon their rights, provided they comply with the laws of each State.

Article III stipulates that any person who has regularly deposited an application for a patent of invention or design or industrial model in one of the contracting States, will enjoy, for the purposes of making the deposit in the other States, a right of priority during a period of twelve months for patents of invention, and four months for designs or industrial models.

According to Article IV, when within the terms fixed, a person has filed applications in several States for the patent of the same invention the rights resulting from patents thus applied for shall be independent of each other.

Article VI provides that the following are considered as inventions: A new manner of manufacturing industrial products; a new machine or mechanical or manual apparatus which serves for the manufacture of said products; the discovery of a new industrial product; the application of known methods for the purpose of securing better results; and every new, original and ornamental design or model for an article of manufacture. The foregoing is to be understood without prejudice to the laws of each State.

Article VIII stipulates that the ownership of a patent of invention comprises the right to enjoy the benefits thereof, and the right to assign or transfer it in accordance with the laws of the country.

In 1910, as I stated, a Convention on Trademarks was also signed. In 1923 and again in 1929 other inter-American conventions were signed on this topic.

The 1929 Convention on Trademarks and Commercial Protection is the latest inter-American instrument in this field. It is in force among the following countries: Colombia, Costa Rica, Guatemala, Haiti, Honduras, Nicaragua, Panama, Paraguay, Peru, and the United States.

In its 37 Articles, this Convention deals in detail with the subjects of trademark protection and protection of commercial names, the repression of unfair competition, repression of false indications of geographical origin or source. Article I contains a provision of general nature, that is, the Contracting States bind themselves to grant to the nationals of the other Contracting States and to domiciled foreigners who own a manufacturing or commercial establishment or an agricultural development in any of the States which have ratified or adhered to the Convention the same rights and remedies which their laws extend to their own nationals or domiciled persons with respect to trademarks, trade names, and the repression of unfair competition and false indications of geographical origin or source.

According to Article III, every mark duly registered or legally protected in one of the Contracting States shall be admitted to registration or deposit and legally protected in the other Contracting States, upon compliance with the formal provisions of the domestic law of such States.

Registration of marks which include national and state flags and coats-of-arms, national or state seals, designs on public coins and postage stamps, official labels, certificates or guarantees, is not permitted unless authorization from the competent authority is obtained (Article IV). Labels, industrial designs, slogans, prints, catalogues or advertisements used to identify or to advertise goods, receive the same protection accorded to trademarks in countries where they are considered as such, upon complying with the requirements of the domestic trademark law (Article V).

The period of protection granted to marks registered, deposited or renewed under the Convention, shall be the period fixed by the law of the State in which registration, deposit or renewal is made and at the time when it is made. (Article X).

In accordance with Article XX, every act or deed contrary to commercial good faith or to the normal and honorable development of

industrial or business activities shall be considered as unfair competition and, therefore, unjust and prohibited. Article XXIII provides that every indication of geographical origin or source which does not actually correspond to the place in which the article, product or merchandise was fabricated, manufactured, produced or harvested, shall be considered fraudulent and illegal, and therefore prohibited.

Now, I would like to mention some regional conventions. One is the Convention of 1889 signed in Montevideo at the First South American Congress of Private International Law. It is in force among five countries: Argentina, Bolivia, Paraguay, Peru and Uruguay. Another regional instrument is the 1911 Agreement which is called the Bolivarian Agreement. It was signed by the Bolivarian countries: Colombia, Venezuela, Peru, Ecuador, and Bolivia.

A recent and very interesting development took place in Central America. On June 1, 1968, the five Central American countries (Costa Rica, Nicaragua, El Salvador, Honduras and Guatemala) signed the Central American Agreement for the Protection of Industrial Property. This agreement deals with marks, commercial names and expressions or symbols of publicity. It is also open for signature by Panama.

I also would like to refer to a very important event in the national field, that is, the new legislation of Brazil on industrial property. Decree-Law No. 254 of February 28, 1967, of the Federal Government of Brazil, approved a new Code of Industrial Property. It is in force throughout the country. In its 178 articles the law deals in detail with the following main subjects: patents of inventions, designs and industrial models, issuance of patents, duration of rights, transfer of patents, inventions of interest to national security, industrial and trademarks, names of companies, titles of establishments, expressions or signs of advertising.

The revision of the inter-American conventions on industrial property has been the concern of the OAS for several years. In 1959, for instance, when the Eleventh Inter-American Conference was to take place in Quito, Ecuador, the Pan American Union prepared a document in which it indicated the need for the revision of the inter-American conventions. The Conference, however, was not held. These conventions are old, and we should bear in mind the tremendous industrial progress of recent years. On that occasion, the Pan American Union suggested that a specialized conference be convened to consider and review the inter-American law on this subject. Similar suggestion was made in 1965 by the Fifth Meeting of the Inter-American Council of Jurists held at San Salvador. In 1967, the Inter-American Juridical Committee studied the matter and approved

a report. In its conclusions, the Committee stated that it is necessary and urgent to improve international protection of industrial property in the hemisphere, for which purpose the Committee requested the Council of the OAS to consider the desirability of consulting the governments of the member States on:

(1) The need for and urgency of better guaranteeing the protection of industrial property in the Americas;

(2) Their desire to participate in the universal system of protection based on the Paris Convention and its extensions, or

(3) Preference for a purely inter-American system.

Speaking in my own personal capacity, I will say that it is possible to harmonize an inter-American system of protection of industrial property with the universal system. I personally think that an inter-American specialized conference under the auspices of the OAS should be convoked to review and to bring up-to-date, the inter-American rules and standards concerning the protection of industrial property.

The patent lawyers and organizations could play a very important role in the process of modernization of the inter-American rules on the subject. Private organizations and individuals have cooperated with international organizations, and cooperation in the field of patents should be promoted to the benefit of all concerned with this problem.

This cooperation is even more necessary in the present circumstances. The progress of science and technology, the development of new programs in the international field and the transfer of technology to the developing countries, require the concerted efforts of patent lawyers and organizations, so that the peoples of these countries will benefit from the transfer of industries and the proper protection of industrial property rights be assured.

In this connection I would like to refer to a very important event that took place in Maracay, Venezuela, in February 1968. I refer to the meeting of the Inter-American Cultural Council of the OAS which took place there and approved the so-called "Resolution of Maracay" which created the programs for the development of education, science and technology.

This resolution states that the presidents of the American countries in their Declaration signed at Punta del Este on April 14, 1967, declared that science and technology offer genuine instruments for Latin American progress and must be given an unprecedented impetus at this time which will enable Latin America to share in the benefits of current scientific and technological progress and thus reduce the widening gap between it and the highly industrialized nations in the area of production techniques and living conditions. In order to fulfill

this aim, the presidents agreed to establish a Regional Scientific and Technological Development Program.

The Resolution of Maracay established a Regional Educational Development Program and a Regional Scientific and Technological Development Program. It stated that the purpose of the Regional Scientific and Technological Development Program is to advance science and technology to a degree that will contribute substantially to an acceleration of economic development, Latin American integration, and the well-being of the peoples as well as making it possible for them to engage in pure and applied scientific research of the highest possible quality. The program will complement Latin American national programs in the area of science and technology and will take into special account the characteristics of each of the countries. The said Resolution also created an Executive Committee to stimulate, guide and coordinate the two regional programs.

A Special Fund was established with two separate accounts: (1) A Special Account for Regional Educational Development Program and, (2) A Special Account for Regional Scientific and Technological Development Program.

During the same meeting of the Inter-American Cultural Council it was decided that a total of 25 million dollars in voluntary contributions from member States was set as the goal for the Special Fund during the first period of operations. This amount was divided as follows: (1) 15 million dollars for the Special Account of the Regional Scientific and Technological Development Program and, (2) 10 million dollars for the Special Account of the Regional Educational Development Program.

These new programs are very significant in the context of inter-American relations. Industrial property should deserve our special attention and we should develop all possible efforts to bring up to date, and modernize the inter-American standards on industrial property. By doing so, we will help the economic and social development of a vast region

Thank you. (Applause)

Probably the reason I didn't mention these conventions is that, as Dr. these many regional conventions among the inter-American countries.

MODERATOR GOLDSMITH: Thank you very much, Dr. Zanotti, for the helpful and valuable information you have given us about inter-American conventions. I want to apologize, Dr. Zanotti, in the first

place, because when I mentioned the various international arrangements, I did mention the Paris Union, but I neglected to mention Zanotti has pointed out, there is so much complication involved in determining just which ones are in force, and just which countries belong to each. I gather from Dr. Zanotti that there is going to be a definite effort to have a more uniform basis, and this, I think, will certainly facilitate transfer of technology and the establishing of patent rights in the Latin American countries, and stimulate the filing of applications for the protection of inventions in these countries.

I was pleased to see that Dr. Zanotti mentioned their desire for cooperation with the so-called private sector, that is with patent lawyers and with industrialists in these countries.

In this connection it is a very happy occasion to have with us, as a discussant to Dr. Zanotti's speech, a man who has been very active in the creation of just this type of thing, an association of individuals in the private sector which would cooperate with the government agencies and organizations in the inter-American countries.

This association fairly recently formed is called ASIPI, which is the Inter-American Association of Patents and Trademarks. Our discussant Francis C. Browne, was very active in the creation of ASIPI in Mexico. I don't know how long ago, perhaps five years, and he was its first president along with one of our Peruvian colleagues.

Francis C. Browne is a partner in the Washington law firm of Browne, Schuyler and Beveridge. He has been active not only in the field of patent law, but also in general legal activities and related public service activities. But I think that he has a special place in his heart for patents and trademarks and particularly for those of our neighbors to the south as evidenced by his activity in the ASIPI organization. He has also been active over many years in the American group of AIPPI (International Patent and Trademark Association) and he is a past president of that association. I present Francis C. Browne. (Applause)

FRANCIS C. BROWNE

Thank you, Del. I was very much impressed yesterday by Dr. Kincaid's talk at the luncheon about this even greater-than-geometric progress, let us call it, in the advance of science and technology within the life time of all of us who are in this room today and who were at

the luncheon yesterday. On the other hand, I detect a note in meetings of the various associations and even in some of the discussions at this Conference, some reluctance to consider, or at least to adopt, change.

The thought that went through my mind is: Why is it that innovators seem to be the last to want to accept innovation? I am glad to know that our speaker, on whose paper I am commenting at this time, is among those who are ready to go forward with improvements and take whatever steps are necessary to bring out the improvements even though it may necessitate innovation.

I think the development of the Inter-American Cultural Council is a real step forward and it deserves the support of every segment of society in the Western Hemisphere—from the industrial sector, the professional, educational, governmental, social and economic sectors—every sector you can think of is needed to make this a workable program so that we will have a good, solid, economic, social and political foundation in the Western Hemisphere.

I think perhaps in looking to our friends in the Latin American countries we tend to treat them more or less as members of the family, and therefore take them for granted. We tend to lump them together as if they were one. We overlook the fact that Brazil has a national language which is different from all other countries—it is also the largest of all the countries. In fact, the United States looks pretty small along-side Brazil, geographically speaking.

So, when we take these things in context, I think you will find that we have been overlooking a "good bet," if you want to call it that, by not paying more attention to the members of our own family in the Western Hemisphere. That is part of what inspired me to cooperate in bringing about the organization of ASIPI, as it is called, and it, in fact, is implementing the very thing that our previous speaker has suggested be done, and that is to develop in each of the Latin American countries communication among a body of people in the profession who will, in turn, communicate with their domestic governments and establish the rapport necessary to, if you please, educate the legislators as to the needs and the problems of industrial property.

Then in the international gatherings of respective national members of ASIPI we can try to bring about some harmonization and, I personally hope, unification of the industrial property laws within the Western Hemisphere. It has been a source of personal satisfaction for me to see how, in the various countries of Latin America, the private organizations have developed.

There are many countries in which no such organization existed before. I think there are only about three countries in which any

organization of any type existed along this line. We now have about 14 or 15 countries in which organized groups are operating and I believe every country except Cuba is represented in ASIPI.

On this problem of implementation of the Inter-American treaties, some criticism has been raised in that these treaties seem to have been on the books but not utilized to any great extent. I think one of the reasons that these treaties have not been as effective as they might have been is due to the lack of the establishment of a Permanent Secretariat to administer the treaties in the inter-American sphere comparable to the manner in which BIRPI has administered the Paris Union in the European sphere. I say that advisedly, because the Paris Union has always been looked upon as a European treaty and a European organization, but with the United States so far in front in technological development we have become an even greater influence and have a greater effect on the operations of those treaties than some of the smaller European countries.

To deal with this problem of the parallel development of inter-American treaties and the Paris Union, I think it is possible for the Paris Union and the people who are considering the Patent Cooperation Treaty to look at what has already been done in the statutes of the respective countries of Latin America which are covered by the inter-American treaties.

I mention, in particular, the matter of "confirmation" or "importation" patents which Dr. Ladas characterized last night in his address as being a logical thing to develop as a means of transferring patent technology to the developing countries. About 11 of the Latin American countries have already provided for so-called "confirmation" or "importation" patents. Actually when you compare Chapter II of the proposed Patent Cooperation Treaty with the philosophy and operation of the "importation" patent system, you will find they are almost parallel. In other words in those countries which honor the Confirmation Patents theory, they accept as final the examination and the issuance of a patent by a foreign country to the extent that the protection becomes effective in their own country, subject to the limitations which Dr. Ladas expressed last night.

He would embody in the proposed plan certain restrictions; namely, that the invention has not been worked in that country prior to the extension of the original patent; and that there be a term of, say, not less than ten years for the protection in the country into which that technology is introduced.

So I would again go back to this point: Let us innovators not be afraid of innovations, because sometimes when you reach back, you

find those things which we thought were innovations were not really innovations at all, but they had been there all the time, but not exposed to the light of day. I think that is technically true with respect to the Confirmation Patent concept. I don't want to take too much time, except to the extent of exploring the problem confronting the Latin American countries in implementing these treaties to which the prior speaker has referred. The problem is attributable, I think, to about three different things, but to two in particular.

First is the Examiner manpower situation. As you well know, the educational system and professional system in the Latin American countries is not conducive to developing personnel who will go into a patent office and become patent Examiners. There is a question of budget and the fiscal aspects which makes it difficult for certain countries to provide the salaries for Examiners even if competent people were available.

The second factor is the lack of availability, in a readily retrievable form, of the necessary technical literature for the Examiners to do a thorough job in the Latin American countries.

The third is the matter of language. Now here, the Latin American countries have an advantage over all the rest of the regional arrangements in the world, because there is more homogeneity of language, culture and customs among the Latin American countries than there is in any comparable geographical or population density anywhere else in the world, with the possible exception of the Orient. Indeed the Spanish language itself, I think, probably is third only to English and French as a means of communication among the literate peoples of the world. Therefore, I don't think language would be a problem to the people in the Latin American countries in handling patent and trademark applications from foreign countries.

If I may just go off on a slight tangent here with respect to this matter of utilizing either Chapter I or Chapter II of PCT. By utilizing the present systems that are available in the Latin American countries, I would point out there are two separate problems. One is the problem of the applicant with respect to the multiplicity of his filings in the foreign countries. The other is the problem of the governments in the duplication of effort in the searching and examining procedure. Those are separate problems and, with our speed of communication and transportation and our greater language facility today, it seems to me as though this matter of multiplicity of filings can be minimized by more direct communication between the originating applicant and the respective government offices in which he expects to file his application. But that does not answer the problem of multiplicity and duplication

of examination of the same subject matter by a variety of offices.

A mention was made by the Moderator about the adaptation of data retrieval systems and computers to searching, and I would say again the United States Patent Office has taken a tremendous lead in the field of adaptation of electronic data processing to the search operation through the medium of the organization called ICIREPAT. (Committee for International Cooperation in Information Retrieval Among Examining Patent Offices.) I think many of you are familiar with it, but for those who are not, this is an organization among the examining patent offices who are trying to develop a common denominator, a common program, a common system, a common language for computerization of the patent literature, with the exchange of information being convertible from one patent office to the other, language-wise as well as subject matter-wise. This can also bring in the Latin American countries as a group, with a definite advantage in this kind of a system because of uniformity of language, and even as Dr. Zanotti would confess, I think the Examiners in Brazil would readily read the Spanish text.

The theme of the program today, namely "Toward the Improvement of International Arrangements for Industrial Property" is certainly being implemented by the Organization of American States, by a few (and I mean few, literally) devoted people, such as Dr. Zanotti and some of his associates, who feel there is a need for carrying this matter forward. They need help, and I would like to add to the invitation that Dr. Zanotti has given, an urgent appeal for you to come to the OAS and extend your help to them. I also extend to you an invitation to join up with ASIPI and help them bring together a consensus of the private sector and help develop the communication between the private sector and the governmental sector and thus bring about an improvement in the international arrangements for industrial property in the Western Hemisphere. Thank you. (Applause)

MODERATOR GOLDSMITH: Thank you, Francis, for a really inspiring talk.

I think we should bear in mind the many things that Mr. Browne has told us. He mentioned the possibility of a Secretariat to operate in the inter-American countries somewhat like BIRPI has been operating in Geneva in administering the Paris and Berne Unions. At this point I want to say that, if in any of our discussions about PCT, I seem to be against BIRPI, I am really not against them at all, because I think

they are a marvelous, efficient organization, and they have been acting as the Secretariat of the Paris and Berne Unions and various other restricted unions in a very efficient way.

I am also very glad that Francis Browne mentioned the Confirmation Patents which were also mentioned by Steve Ladas in his talk last night. As Francis points out, these presently exist in many of the Latin American countries and in some respects they are really a forerunner to the ideas of harmonization and simplification which are now being produced for PCT. I think that perhaps there has to be more unification as far as Confirmation Patents in order to make them practical and more used than they are today. Their basic idea is a very modern one namely, for purposes of simplification and harmonization, to take a patent granted in one country and let it be registered or confirmed or revalidated in other countries, particularly countries of a developing nature.

I don't agree with Francis that we have actually reached the stage in many of the Latin American countries where the issued patent in the foreign country is taken immediately and given value as a national patent through the confirmation procedure, because many of the countries, such as Argentina and Colombia, for example, will make practically the same examination of a confirmation patent application as they do of a regular patent application. I think if this were changed in the manner outlined by Francis Browne probably there would be more use of the Confirmation Patents. As regards the language situation, here again as Francis has pointed out, we have a large group of countries and a group of progressive countries which are developing to a fast extent and where the same language is spoken.

Francis mentioned that perhaps the Brazilian Examiners would understand a specification written in Spanish and I am sure they would understand, but I think they might be slightly annoyed if we didn't use their national language. Of course, this is something that can be taken care of in the future.

Now we can go on to our next international speaker and here we have a double threat man because Robert E. Simpson, who is our next speaker, will have to be his own discussant as he will read a speech of Dr. Robert Oshins and Mr. Vladimir Dolezil of UNIDO.

Mr. Simpson is an important official in our own Department of Commerce. He is the Director of International Regional Economics of the Bureau of International Commerce of that Department. His background is that of an economist and he has been a member of many United States delegations to tariff and trade meetings, and also has been a member of trade missions to other countries.

Dr. Oshins is Director of the Industrial Services and Institutions Division of UNIDO, and Mr. Dolezil is Industrial Development Officer. So at this point I am happy to present to you Mr. Simpson, first to read Mr. Oshins' paper, and then to give us his comments on it. (Applause)

UNIDO*

MR. SIMPSON: Thank you very much, Mr. Chairman. Your program committee approached me and asked whether, because of Dr. Afifi's inability to attend, I could present and comment on his paper.

I should like to comment that I ran into Dr. Afifi in New York in another meeting about two weeks ago and learned for the first time that, because of a change in the situation in Vienna, the paper I am about to read is not his paper. It was prepared in his absence by Robert Oshins, the Director of his Division, and Vladimir Dolezil also of UNIDO. It contains the standard disclaimer that "the views and opinions expressed in this paper are those of the authors and do not necessarily reflect the views of UNIDO." With this introduction, let me read the text of this paper. I will make one parenthetical point in advance. The contents of this relatively brief paper in part pose one or two questions, which it describes essentially as moot, with respect to the role of patents in industrialization. It then proceeds to give some ideas concerning the program approach which this new United Naions organization in the industry field, UNIDO, visualizes that it may take in that part of its work which relates to patents. I assume from our overall topic this morning that it is the second part which is the main contribution which this paper and my presentation can make to today's session.

---

* United Nations Industrial Development Organization

The Role of Patents in the Industrialization of the Developing Countries*

ROBERT L. OSHINS and VLADIMIR DOLEZIL**

INTRODUCTION

Special governmental efforts to accelerate economic development are the subject of much discussion nowadays. In fact, we sometimes sound as if such efforts were themselves a recent invention.

Actually, of course, efforts of this type have been going on for centuries, and patents, in one form or another, are one of the earliest tools of this particular trade.

By granting a statutory privilege to an inventor or a person deriving his rights from an inventor, for a limited time in order to exclude other persons from manufacturing or selling a product or from using a method or process covered by the patent, governments have long consciously sought to encourage technical progress and industrial development.

Historically, this approach appears to have been effective in the already developed countries. Indeed, there is obvious evidence that patent systems have had a favorable effect on industrialization by:

(1) Encouraging research and invention on the part of the individual;

(2) Inducing inventors to disclose their discoveries instead of keeping them as trade secrets;

(3) Offering a reward for the expense of developing inventions to the stage at which they were commercially practicable; and

(4) Providing an inducement to invest capital in new lines of production which might not have appeared profitable if many competing producers had embarked on them simultaneously.[1]

---

* The views and opinions expressed in this paper are those of the authors and do not necessarily reflect the views of the Secretariat of UNIDO.

** Robert Oshins is Director, Industrial Services and Institutions Division, UNIDO. Vladimir Dolezil is Industrial Development Officer, UNIDO.

[1] See *The Role of Patents in the Transfer of Technology to Developing Countries,* United Nations, New York, 1964 (E/3861/Rev.1), p. 10.

In considering the problems of the new developing countries, in this and other fields, there is the usual propensity on the part of the old and rich to say to the young and poor: "Go and do what I did when I was a boy and you, too, will succeed!"

This approach generates the usual negative reaction of the young, who say, in effect: "Forget it Dad! Things are just so different now from way back then, that nothing you did has much value to me."

And, as in the traditional father-son confrontation, both sides have a point!

From the standpoint of the presently developing countries, such empirical evidence as there is, indicates clearly that—to the extent that they have tried to follow the established patent system—it has just not brought them much in the way of either local invention or imports of foreign proprietary technology.

Of 31 developing countries for which data are available, *no* patents were granted to local inventors in nine of them in 1965, and 15 others granted less than 20 such patents.

In the same 31 developing countries, only six—Greece, India, Mexico, Pakistan, Spain and Venezuela—had more than 1,000 patents granted in total in 1965. Of the remaining 25 countries, 14 had between 100 and 1,000 granted patents and 11 had less than 100 during the same year (see annex appended).

Even within these limited numbers of patents granted, the presumption is that a high proportion have not actually been introduced into production in the developing countries involved. Indeed many developing countries feel that most foreign patents are taken out primarily for the purpose of protecting export markets for foreign firms, rather than to develop local production.

The fact is that what worked for Dad, just isn't working out for Junior. Moreover, there is a strong argument that the nature of invention has changed so much that the old formula *can't* work in the same way.

The older countries were working from a lower technological base. It was a reasonable assumption that, given appropriate encouragement, bright young men with limited resources could, in fact, tinker about and come up with significant inventions. Now most inventions are the product of highly sophisticated research and development work by teams of highly trained experts, working with elaborate and expensive facilities. Since the developing countries do not have these resources, the argument runs, they just cannot play in this game. So the "encouragement of local invention" advantage of a patent system

loses much of its force.

Secondly, with regard to foreign inventions, the argument is that, in any case, much of the technology most relevant to developing countries is not actually the most advanced type, currently protected by patents. Even where such protected technology is involved, so much surrounding know-how and capital is required that the patented knowledge, per se, is only a minor factor in a decision by a foreign firm to start or not to start production in a particular country, either by direct investment or licensing.

So much for a compressed and over-simplified version of Junior's side of the discussion. Dad has a few telling answers on his side. First of all, he can say, with justice, that one of the main reasons most developing countries don't seem to get much out of patent systems is that the systems they are using are archaic. Some of the developing countries have patent laws which haven't been changed in more than 100 years. Most of the Latin American countries have patent laws dating back to 30-60 years ago, and the majority of the former colonies maintain patent laws which were in force before their independence.

Beyond antiquated laws, the actual administration of patent systems in many developing countries ranges from miserable to almost nonexistent. Potential patentees often complain with bitterness and considerable justice of slow action and unstable interpretations which make efforts to secure protection in such countries more trouble than the protection is worth.

Furthermore, foreign patent holders complain that when they do take the trouble to obtain local protection and do license local production, they are beset by arbitrary fee limitations, exchange restrictions and other hazards, so that the whole effort is hardly worthwhile.

The result of all this, according to this line of argument, is that the developing countries get perpetually further behind in technological development. Such local inventiveness as may exist is discouraged rather than encouraged and transmission of needed foreign technology —and investment—is sharply reduced.

It is not our purpose in this brief paper to try to resolve this complex argument. Rather it is to point out the fact that the whole area needs fresh and objective study and thinking. Rather than continuing the "t'is-t'aint" argument along conventional lines, it is in everyone's interest to try to develop fresh approaches which preserve the best of the received wisdom, but which also really fit present day circumstances.

This is why it is so encouraging that conferences like this are being held; that many universities are working on the problem; that organizations like BIRPI and the ESA (Economic and Social Affairs) Division of the UN are giving deep thought to the problems of the developing countries in this important field.

The Role of UNIDO

As a relatively new starter in a complex area of work, UNIDO's basic approach is to try to supplement and support rather than to replace in any way the long-standing work of other organizations. We are still trying to define the precise ways in which our limited resources can be used most effectively.

So far, we are considering specific activities along the following lines:

(1) Publication, in cooperation with BIRPI, of an authoritative compilation of patent laws and regulations on a worldwide basis.

(2) Increased provision of foreign experts to assist interested developing countries in improving their patent laws and administration. Such assistance will be provided in cooperation with such organizations as BIRPI, OAMPI and the International Patent Institute in The Hague.

(3) Support of training programs for patent officials of developing countries.

(4) Possible establishment of a "proprietary technology information bank." This idea still needs a great deal of development work, but the general concept would be to list and classify, on a highly selective basis, the nature and sources of expired patents, existing patents not protected in certain areas, protected technology available for licensing on a nominal-fee basis and protected technology available for commercial licensing. This information would be computerized and made available to developing countries on request.

(5) Further, in the area of licensing, UNIDO plans to undertake the following projects in 1969: a) An expert group meeting will be convened to discuss the costs of transferring proprietary technology to developing countries; b) Short training courses will be organized in response to country requests, for prospective licensees in developing countries; and c) A basic manual for industrial licensees in developing countries will be prepared.

UNIDO will greatly welcome reactions and suggestions on any of these ideas and on any similar activities which UNIDO might usefully undertake.

ANNEX

PATENTS GRANTED IN SELECTED DEVELOPING COUNTRIES IN 1965*

Country	Patents Granted to Nationals, Including Foreigners Resident in the Country	Total Patents Granted
Less than 100 patents:		
Burundi	1	4
Cyprus	0	34
Dominican Republic	2	15
Ghana	0	75
Jordan	0	26
Kenya	0	90
Laos	0	22
Malta	0	8
Sierra Leone	0	39
Tanzania	0	77
Uganda	0	61
Between 100–1,000 patents:		
Ceylon	7	133
Chile	50	590
Colombia	51	779
Guatemala	7	142
Iran	31	950
Iraq	62	191
South Korea	177	289
Philippines	21	529
Rhodesia	18	477
Syria	4	142
Trinidad and Tobago	2	131
Tunisia	8	230
Turkey	45	600
UAR	30	867

* Source *Industrial Property*, No. 12, 1966.

ANNEX (CONT'D)

PATENTS GRANTED IN SELECTED DEVELOPING COUNTRIES IN 1965*

Country	Patents Granted to Nationals, Incluning Forhigners Resident in the Country	Total Patents Granted
More than 1,000 patents:		
Greece	1,074	2,057
India	352	3,584
Mexico	146	1,840
Pakistan	70	11,029
Spain	3,400	0,804
Venezuela	57	1,044

* Source: *Industrial Property*, No. 12, 1966.

ROBERT E. SIMPSON

SUMMARY

The main substantive issue raised by the Oshins-Dolezil paper is the possible obsolescence of the patent system in the new circumstances of the developing countries. It suggests the possibility that under the conditions in these countries the traditional type of patent system cannot be very effective in stimulating technological development based directly on the indigenous resources of the country.

Whatever the merits of this contention respecting indigenous technology, an effective patent system continues to be an essential ingredient for maintaining an investment climate which will attract industrial investment from outside and with it the vital technology which accompanies such investment. Because this external technology is so vital to the industrial progress of the developing countries, an effective patent system can contribute a great deal to their industrial progress regardless of the answer to the more limited question posed by the paper.

The United Nations Industrial Development Organization, UNIDO, is one of the youngest of the United Nations organizations. It is responsible for a varied program designed to assist and stimulate industrialization in the developing countries. The subject of patents is one of about 50 major topics included in its field of activity. The Organization projects a number of projects relating to patents in its 1968 and 1969 plans. Presumably this initial program of patent-related activity will be expanded in the future.

The United States government, as a member of the governing body of UNIDO, is anxious to have the views and counsel of private experts in the patent field concerning the kind of UNIDO activity which would be most valuable and constructive.

Mr. Chairman, if I may briefly turn to what you generously alluded to as my second threat. I want to make one comment on the substance of this paper, and then three or four comments about UNIDO as a new piece of machinery in this very broad field.

The main issue of substance which Bob Oshins and his collaborator raised was the possible obsolescence of ineffectiveness of the patent system in the new circumstances of the developing countries. To the extent that I approach this with a viewpoint, it is the viewpoint of our interest in the Department of Commerce in the effect of the patent systems abroad on the effectiveness of U.S. business operations overseas —our traders and investors—and the further effects which that in turn has on the industrialization of the countries themselves. This is, of course, the primary interest of UNIDO. Whatever the merits of the issue which this paper raises concerning the continued effectiveness of the system in generating technological development from the indigenous resources of the developing country, certainly we continue to think of the patent system as a very important part of the investment climate overseas. Quite aside from the first issue, a successful and effective patent system seems to us to be a very important constituent of a climate which will attract American and other industrial investment, with all the technology—both patented and, in many cases the more important part of it, not patented—which comes with such investment.

I should like to turn now in the very short time I have remaining to elaborate on this new organization in the firmament of international organizations in the patent field.

UNIDO is really the youngest of the so-called specialized agencies in the United Nations. It is only going into its second year of formal existence in its present form, created by the General Assembly at the end of 1966. To be very pragmatic about it, it consists of approximately 600 people with headquarters in Vienna under the direction of its Executive Director, a distinguished Egyptian scientist and economist, Dr. I. H. Abdel Rahman. It administers several million dollars a year of United Nations technical assistance money in the form of technical assistance projects in dozens of developing countries around the world, and has in the formative stage a fairly substantial program of research and promotional activity at its Vienna headquarters, on behalf of industrialization.

The subject of patents represents about a third of one of the 15 major fields of activity which it embarks on. In short, it is one of about 50 topics that one might identify in UNIDO's whole area of activity. The General Assembly Resolution which created UNIDO made

reference to the patent area along with many, many other areas as areas of importance with respect to more rapid industrialization of the developing countries and gave UNIDO a broad charter to undertake constructive activity in this field.

Essentially, it has two ways to do this. It is responsible in the first place for overlooking the entire United Nations system, identifying all of the various activities in all of the many different UN organizations which have some bearing, direct and indirect, on industrialization. It has some responsibility for exerting leadership to identify gaps in this work and try to make sense of the United Nations work as a whole in the industrial field.

Secondly, as I have already mentioned, it administers a lot of direct technical assistance activity as a recruiter of experts and a supervisor of the professional work. The Organization has described its patent responsibility fairly well in the list of five points the paper made.

I would add to that an examination of UNIDO's 1968 and 1969 program plans, confirmed by direct conversations with the staff of the Organization, indicates that, in fact, as of this time, they have not projected many specific activities in the particular field of patents. I think it would be fair to say, and I think Bob Oshins would agree with me, that this is still a blank slate—an important one—upon which it remains for them to write, and for this reason, now is a fairly strategic time in UNIDO's development for any constructive suggestions that any of us may have to offer.

They have two or three specific projects which the paper alluded to, including some Expert Working Groups. At the Vienna meeting which I attended a few weeks ago—the Annual Board of Directors' Meeting, in effect—there was also considerable discussion of the publications idea, and BIRPI indicated that it would be happy to cooperate some way in this project.

Speaking from the United States government side, I would say that one of our major interests with respect to UNIDO is to see that it is effective in its coordination role. We are anxious to encourage the Organization, in its overview of the work of the many UN agencies which touch industry in one way or another, to find gaps that can be filled rather than to argue about who should do work that is already being well done. Certainly, we hope its relation to BIRPI, as with other organizations of that kind, will be to supplement rather than to duplicate.

The main specific project to which this paper refers, certainly the most ambitious one, is the proposal for a technology information bank. This project is one that we, as well as UNIDO, regard as being in a

very early stage of thinking. Our whole effort has been to encourage them to go very slowly and cautiously, because of the uncertain and seemingly very large implications of such a project, both substantively and financially.

The final point I want to make is that the Departments of Commerce and State, which are mainly responsible for maintaining our contact with UNIDO and the attitudes we take on their programs, are giving increasing thought to how to design and develop the machinery which we must have to insure that the proper parts of our private sector—in the case of the patent field, the part represented by our audience here today—are involved. They must have a full opportunity to keep track of what is happening and to keep track especially of what is proposed and to make a full contribution to U.S. government decisions on these matters.

We are hoping that in the patent field, we can rely on Commissioner Brenner's bureau, the Patent Office, as our immediate line of liaison, and that through the Patent Office we can make sure our positions on UNIDO matters reflect the expert judgment of the private sector. Thank you very much. (Applause)

MODERATOR GOLDSMITH: Thank you, Mr. Simpson.

I greatly enjoyed both the Oshins-Dolezil paper and also Robert Simpson's comments on it. I just have a few comments of my own as we are running a little late.

I don't think we should be too discouraged by the fact that many of the developing countries have old patent laws. As a matter of fact, France, which is hardly a developing country, has gotten along fairly well on a 100-year-old patent law, and it has only just effected revision on it which will probably go into effect next January . I think even the old patent laws plus the device Confirmation Patents mentioned previously will permit exchange of technology even though, of course, improvements may be made.

I think one of the important regions where more information is needed, and perhaps Professor Harris can consider this for a possible research project, is whether the patenting of inventions in developing countries is used only for the purpose of protecting exports. It seems to me that, even if in the beginning there is some protection of exports, that may not be too bad because, if there is considerable exporting to a country under the protection of the patent plus working requirements of the country's patent law which can be as strict or as lenient as they

want, the protected export or the import into the country can be used to build up a demand for a patented product, and then the next step can be manufacture in the country.

Perhaps it will start with assembly or making one component. But it seems to me that these are steps toward improving the economy of the country itself, and I don't think we should turn down the idea of patent protection merely because it may start with the protection of exports. At any rate, I think that considerably more research and facts are necessary on this point.

The other point that was mentioned was the small amount of local invention and that the patent laws were not doing very much to develop local invention. Here again, I don't think we should be too worried. The developing country has to start with a small amount of invention but, for that reason we don't have to throw out the baby with the bath water. Keep the patent system and try to improve it. Then over the years, especially as industries come to the developing country under the protection, under the exclusivity provided by a patent system, this probably will have an effect of developing local inventions in that country.

As far as this bank of technology which was mentioned, this worries me a little as perhaps being a departure from our private enterprise system if we turn over to international governmental organizations too much of the activities in connection with licensing. After all, companies in the United States are rather interested in stretching out into new frontiers and into foreign development, as our next speaker will undoubtedly tell us. So I think there is the profit motive itself which is going to cause the licensing of technology, if there is a fertile field for it in any developing country.

I think that the industrialists and the government officials of the developing country can very readily get together with any enterprise in a developed country with a view to having some actual transfer of technology in the form of an industrial use in the developing country.

Bear in mind that even in the case of unpatented technology—as we all know there is a tremendous amount of unpatented technology—the incentive to give this unpatented or to transfer this unpatented technology to the developing country is increased tremendously if there are patents involved. Even though the proportion of patented technology may be small, there is an exclusivity and that protection provided by the patent will stimulate the transfer of the unpatented technology.

Our next speaker was to have been Jean Monnet who is Director of the famous French chemical pharmaceutical firm of Rhone-

Poulenc, and also the President of the French group of AIPPI. Rhone-Poulenc's headquarters are, of course, in Paris and this is the reason Mr. Monnet is not with us today, because Paris, just as Washington, has its own troubles.

So the discussant for Mr. Monnet's nonexistent paper will have a harder job to do than normal. He is Robert L. Werner, Executive Vice President and General Counsel of the Radio Corporation of America. He is also a director in RCA's many foreign companies, so he has the expertise to discuss the many property arrangements, especially in the European field, about which Mr. Monnet presumably would have been able to tell us. Therefore, I have the pleasure of turning the meeting over to Robert L. Werner. (Applause)

EEC*

ROBERT L. WERNER

SUMMARY

Industrial development under and implementation of the Common Market Treaty will lead to conflicts between the rights of patentees and the rules of competition. As has been the experience in the United States, it is believed that the permissible scope of restrictive provisions in patent licensing agreements in the Common Market will be affected by the rules of competition.

Technological advances already made and projected present opportunities for closer cooperation in the industrial sector of the nations of the world. Such cooperation can be fostered by creation of a patent structure which would make possible the grant of an internationally recognized patent.

Mr. Moderator, Dr. Ladas, Commissioner Brenner, Ladies and Gentlemen, while I appreciate Mr. Goldsmith's generous introduc-

* European Economic Community

tion, I should make clear at the outset that I feel somewhat as the previous speaker has expressed himself for I am not a member of the Patent Bar nor do I claim expertise in that field.

When your distinguished guest, our mutual friend, Steve Ladas, asked that I speak at this meeting which is in his honor, I could not say no, but I did make my limitations entirely clear. With that understanding, I am honored to be here in the company of such distinguished members of the Patent Bar and ask your indulgence for my limited background and possibly different approach.

I, of course, share in the disappointment expressed by our moderator that Dr. Monnet was unable to be with us today. Dr. Monnet has said a number of very interesting things about patents, especially on the subject of the proposed European Patent and the Common Market Treaty Provisions dealing with competition. I had particularly looked forward to meeting Dr. Monnet because I have had the privilege of reading a letter written by him in 1964 to Pieter VerLoren van Themaat, Director General of the Office of Competitive Trade Practices of the EEC.

It is Dr. Monnet's thesis, as set forth at some length in his letter, that in the EEC a patent "cannot be subject to regulations as regards competition since by definition the essential right of the patent holder is to prohibit competition with respect to the said patent." Dr. Monnet reasoned that, "To restrict the patent holder's freedom of action is very simply to curtail the stimulation of industrial progress in favor of a possible stimulation of competition," and he concluded, "There is no possible economic balance in this regard."

These words struck a very familiar note since they are strikingly similar to comments which were made by many United States patent lawyers and experts in the late Forties and Fifties when a number of antitrust cases involving patents and their exploitation were before the American courts. The patent lawyers in these cases contended, as does Dr. Monnet that, since the patent constituted the grant of a legal monopoly to the patentee, he should be entitled to control its use by others in any way he saw fit. It was his property, they said, something that did not exist before, but that came into existence only through his creative talents and efforts. Therefore, the argument went, why should he not have the right to place conditions and limitations upon its use and upon products made by others under license to him even if these conditions and limitations resulted in severe restrictions upon competition in addition to the natural patent monopoly and grant.

This position was taken by many eminent members of the Patent Bar of this country. In fact, for many years before the Justice

Department's attack on patent licensing agreements, which commenced just prior to World War II, it was the general state of the law in the United States.

However, as we all know, the Justice Department attacked many of the restrictive provisions in these patent licensing agreements, contending they went beyond the proper scope of the patent monopoly and the lawful awards to the patentee for his inventive contribution.

Our courts, for the most part, have agreed with the Justice Department. They have accepted the Department's contention that patent property, when exploited through grant of rights to others, is like many other kinds of property and may not be used to suppress or eliminate competition.

For example, speaking to this point in 1944, the United States Supreme Court said:

> The grant of a patent is the grant of a special privilege "to promote the Progress of Science and useful Arts". Const., Art. I, §[paragraph] 8. It carries, of course, a right to be free from competition in the practice of the invention.
>
> But the limits of the patent are narrowly and strictly confined to the precise terms of the grant. . . . It is the public interest which is dominant in the patent system. . . . It is the protection of the public in a system of free enterprise which alike nullifies a patent where any part of it is invalid . . . and denies to the patentee after issuance the power to use it in such a way as to acquire a monopoly which is not plainly within the terms of the grant.
>
> The necessities or convenience of the patentee do not justify any use of the monopoly of the patent to create another monopoly. The fact that the patentee has the power to refuse a license does not enable him to enlarge the monopoly of the patent by the expedient of attaching conditions to its use. . . . The method by which the monopoly is sought to be extended is immaterial. . . . The patent is a privilege.
>
> But it is a privilege which is conditioned by a public purpose.[1]

And the Supreme Court has reiterated this policy in many subsequent decisions involving patents and the antitrust laws.

While I have every respect for Dr. Monnet's point of view, for he is a man of wide experience in patent matters, I personally venture the thought that in the Common Market, just as in the United States, where there is a clash between the patent law and the competition law, the likely prospect is that the competition law will prevail.

The opinion of the European Court of Justice in the *Grundig* case (1966) is of interest in this connection. Although in that case the Court was dealing with exclusive distributorship agreements and trademark licenses, by a parity of reasoning its comments would seem

---

[1] Mercoid Corp. v. Mid-Continent Co., 320 U.S. 661,665.

equally applicable to patents.

Grundig and Consten, the contracting parties, had appealed from an unfavorable decision by the Commission. Among other arguments, they contended that Articles 36, 222 and 234 of the Rome Treaty prevented the Community Law, especially Article 85, from having control over the exercise of industrial property rights under domestic law.

The Court of Justice rejected this contention. In sustaining the application of the Community Competition Law, it said:

> This competition system, because of its nature . . . and because of its purpose, does not permit the use of rights flowing from the trademark law of the different Member States for purposes contrary to the Community cartel law.

And so I believe that, as has been the case with other matters relating to trade regulation in Europe, the trend is toward an interpretation more consonant with United States antitrust thinking. In making this observation, I am quite aware of such later cases as *Parke Davis* for in my view only the most superficial reader would take comfort in these decisions.

Now, I should like to discuss briefly with you the EEC concept of a Convention for a European or EEC patent. A draft of such a Convention has been prepared by EEC member government representatives and experts and published. Due to political and technical reasons, it has not been adopted.

Commissioner Brenner, with admirable clarity, has discussed the importance of the proposed Patent Cooperation Treaty and it is entirely possible that the attention given that important document also has had the effect of slowing down definitive EEC action.

In general, the proposed draft provides for the creation of the European system of patent law and the granting of European patents valid in all member States. Under this proposal, a European patent could not be assigned or permitted to lapse in only a part of the territory covered by the Convention, but its application would be uniform throughout the EEC. An administrative authority, designated the European Patent Office, and a judicial authority, called the European Patent Court, would be created to grant patents and deal with legal actions relating to them.

The European Patent Office would function with administrative and financial independence, and at the lower level it would comprise examining sections and divisions and patent administration divisions. Above these would be boards of appeal and revocation boards which would resemble courts. The boards of appeal would be empowered to

decide appeals from the decisions taken by the sections and divisions. The revocation boards would rule on applications for revocation of European patents, and also on applications for compulsory licenses.

The European Patent Office would examine an application for a patent as to form. This examination would be followed by a novelty report prepared by the International Patent Institute at The Hague.

Then, on the basis of these examinations, a provisional European patent would be granted about 18 months from the date of the application. The provisional patent would then be published together with the novelty report. A provisional patent would lapse five years after the date of the original application, unless an additional application were made within that time to confirm the provisional patent as a final European patent.

An application for an examination of a provisional patent could be made by the holder of the patent or by any third party. The Patent Office would examine the provisional patent as to its novelty and the degree of inventiveness. The term of European patents would be 20 years from the date of application. Protection would start from the date the provisional patent is published.

The concept of compulsory licensing also has been adopted by the draft Convention. Compulsory licenses would be effective within the territory of the member States, and would be granted if the invention were not sufficiently worked, if there were interdependence with earlier patents, and in cases covered by provisions of the Euratom Treaty. The contracting States could also issue their own national compulsory licenses in the public interest but these latter would be effective only in the territory of the individual State granting such a license.

Infringement proceedings under European patents would be instituted in the national courts of the contracting nations as now is the case of actions for infringement of domestic patents. The national courts would, in principle, decide in accordance with their national legislation.

However, if the validity of a provisional European patent were contested during proceedings for infringement of that patent, a decision establishing an infringement could be taken only after the provisional European patent had been confirmed as a final European patent. If during an action for infringement of a final European patent, the defendant questioned the validity of the patent, the Court would stay proceedings pending a decision by the revocation board of the European Patent Office. If questions of interpretation arose in the infringement proceedings, domestic courts would submit them to the

European Patent Court for interlocutory decision.

In addition to these cases, the European Patent Court would also hear appeals on points of law from decisions of the appeal boards and revocation boards of the European Patent Office.

During the transitional period while the European Patent Office was being established, the Convention would provide a procedure for the joint filing of national patent applications and, in certain cases, the Convention would make it possible to convert an application for a European patent into one for a national patent.

Finally, the Convention would not impair the right of the contracting States to maintain their domestic patent law, suitably shaped to accord with and complement the European patent system.

Two fundamental problems raised by the draft European Patent Convention are still under study by the EEC Commission's working part. The consequences of the choice that would have to be made between the Community patent and the adjusted international patent have not been resolved.

In addition, the problem of whether third countries would come within the Community patent by means of association is as yet undecided and poses a major question.

Now I would like to turn to more general observations and discuss with you some aspects of the increasing trend toward the improvement of international arrangements for industrial property.

It is now over 75 years since one of the great steps was taken in Paris to provide for the international recognition and protection of various types of industrial property rights. As our Moderator has already pointed out, the Paris Convention of 1883 is one of the few international arrangements which has been substantially immune from criticism. And it is no small accomplishment that it has successfully survived two world wars.

During the intervening years there have, of course, been a number of international conventions affecting States within the EEC and dealing in one way or another with some aspects of industrial property rights. Some of these have made significant contributions to international reciprocity in the areas of patents, trademarks and copyrights but progress has in general not been up to expectations.

It is somewhat ironic that after the signal successes of the Washington, The Hague and the London Conferences for amendment and supplementation of the Paris Convention, so little was accomplished at the last conference at Lisbon in 1958.

As our dear friend, Steve Ladas, so aptly put it, "No other Conference in the history of the Paris Convention presented a situation

where so many desirable amendments were rejected by the vote of a single country. The unanimity rule operated with a vengeance."

It seems to me that some mechanism is needed to avoid loss of the tremendous time and energy that is devoted by so many representatives and experts to the advancement of trade relationships among nations through the veto power of one member. As we all know, while some of the objections to acceptance of particular proposals are technical in nature, many of them are political. As I see it, there is still too strong a desire on the part of some governments to want their own systems to be accepted by others and a reluctance to accept compromise for the purpose of achieving progress.

This seems to apply especially to the larger European governments which have long-established systems with which they are familiar and which they wish to retain. Distinguished experts in our own country have from time to time evidenced this same reluctance. The divergence of opinion between Commissioner Brenner who advocates the Patent Cooperation Treaty and the distinguished discussant who followed him is a timely example.

But I do not want to strike a negative note today. Rather, I want to sound an affirmative and I hope an encouraging one. The unparalleled strides which have been taken in the field of technological advancement in the past 25 years present us with opportunities for international cooperation for the betterment of life, the strengthening of economies and the development of emerging nations, the like of which we have never seen.

To become very specific, I turn first to the patent field. We all know there are countries which have no patent systems, that among the many national patent systems which do exist, there are numerous differences both of a substantive and procedural nature and through the sponsorship of the United Nations and others, model patent laws have been drafted to assist developing countries to place themselves in a more advantageous position for inviting investment and technical aid from the more advanced nations.

When one weighs the import of Commissioner Brenner's remarks and realizes that in order for an inventor or his assignee to obtain patent protection for his invention so that it can be made available for broad international use, he must file in numerous countries, conform his many applications to the peculiar requirements of each and end up with a kind of protection which differs markedly from one country to the next, the need for innovation becomes apparent.

When one also takes account of the fact that technologies are growing at such a rapid pace and becoming even more complex in the

process, the need for early change is a compelling one. An international patent structure based upon the grant of a patent to be recognized in all countries is the goal to which our best efforts should be bent. The new means now available to us in the form of electronic data storage and retrieval systems, worldwide communication devices and processes for rapid reproduction of the written word and picture now for the first time make such a system feasible. The advances which such a system would bring for the interchange of technology are exciting to contemplate.

None of us is so naive as to think that such a system could be accomplished overnight or in less than a span of years. But now is the time to make a start. While I realize there are some who regard such a concept as visionary, I do not agree. As an earlier speaker asked, why is it that innovators in one field so often resist innovation in others? Such a start could and should begin now through the efforts of a few of the major countries sophisticated in the use of technology and conscious of the great benefits that would flow from it. Later, other countries could join as the value of the system became more evident.

The desirability of movement in this direction was importantly pointed out in the report of the Commission on the Patent System appointed by the President of the United States.

In its report, issued in November, 1966, the Commission said:

> The Commission believes that the ultimate goal in the protection of inventions should be the establishment of a universal patent, respected throughout the world, issued in the light of, and inventive over, all of the prior art of the world, and obtained quickly and inexpensively on a single application, but only in return for a genuine contribution to the progress of the useful arts.
>
> To this end the Commission specifically recommends the pursuit of: (1) international harmonization of patent practice, (2) the formation of regional patent system groups, and (3) a universal network of mechanized information storage and retrieval systems.

I also believe that improvement in the patent system needs to be accompanied by measures giving greater international recognition and protection to know-how. Although the right to use a patent can be a very valuable one, frequently the technical and manufacturing know-how is required to permit effective utilization of that patent.

While know-how receives a limited recognition under some theories of law, no adequate statutory protection for it now exists. As a consequence, the supplier of know-how must depend upon very carefully drawn contract provisions whose enforcement is difficult and questionable if he wishes to safeguard his intellectual property. It would seem to me, therefore, that it would be most helpful were

future conventions of the EEC and other national and international groups to devote special emphasis to proposals designed to afford greater protection for know-how so that those who do possess it will be encouraged to share it with the assurance that it will not be used against their legitimate interests.

This brings me to the third and last item I shall discuss. This subject is one which falls within an area which is often a confusing and vexing one for our businessmen. It is the United States antitrust law and its application to the EEC and international trade as a whole.

The extraterritorial application of the United States antitrust laws has, in my opinion, caused serious problems to the expansion of trade between the American businessman and his foreign counterpart. It has not infrequently been an impediment to such trade and also a source of friction between the United States government and the governments of foreign nations.

It is interesting to note that Articles 85 and 86 of the Rome Treaty dealing with the subject of competition concern themselves with dealings affecting trade between member States and not with those involving trade between enterprises within one of the member States and enterprises outside the Community, except insofar as such dealings interfere with trade between member States. And even in situations involving such intra-Community competition there are provisions for exemptions where concerted practices can be shown to promote technical or economic progress.

By contrast, the United States antitrust laws leave little room for justification of a concerted practice on the ground that it will advance technological development or promote economic progress. Such arguments are usually foreclosed to the participants.

There are a number of important differences between these two sets of laws in other respects. For example, Article 86 of the Treaty, unlike Section 2 of the Sherman Act, deals with abuse of a dominant position rather than the attainment of such a position. And, of course, there is no counterpart of Section 7 of the Clayton Act to be found in the provisions of the Rome Treaty or its implementing Regulations.

Bigness of business is treated by the European Economic Community as a natural and even desirable thing, particularly for purposes of achieving effective competition in world trade.

On the other hand, the effect of the United States antitrust laws as applied today is to curtail bigness which some apparently regard as something bad in itself. One need only look at the recent merger guidelines issued by the Department of Justice to see the great concern our government has with market structure and size even apart from

any abusive practices in which large companies might engage.

My own view is that realism requires that if international trade by American business is to be encouraged through the grant of industrial property rights, then the American businessman and his foreign counterpart are entitled to some more tangible assurance by our government.

The Regulations implementing Articles 85 and 86 of the Rome Treaty seem to me to be helpful to the parties contemplating such international transactions. What may well be called for from United States agencies is some definite set of guidelines or an advisory body to which we can turn for help. Certainly the relatively few case decisions on international transactions that have been handed down by our courts do not perform this function.

It does not seem to me that it would be unreasonable, or contrary to the best interests of the United States, to permit an American company, which at considerable expense has developed valuable industrial property, to make that property available for use by foreign companies and for a limited period of time to be able to protect itself against its use to compete with the American company in its own country. I am not suggesting any unlimited or unqualified exemption from competition. What I am suggesting is a limited and qualified exception which I believe would stimulate more international trade and encourage American companies to share their industrial technology with foreign industry.

And, finally, I suggest that now, when the EEC is developing the application of its rules improving arrangements for industrial property, would be the optimum time for a review of the application of our own laws to achieve a more harmonious and constructive result.

I know of no valid reason why both the American businessman and his foreign counterpart should not be able to trade in the international market on an equal footing, under a set of rules which are clear and fair to both, and which do not discriminate as to either. (Applause)

MODERATOR GOLDSMITH: As Mr. Werner suggests, perhaps we can have a little bit of reverse action whereby the less strict antitrust laws of these other jurisdictions could be applied to U.S. situations and more harmony obtained in the antitrust field.

Mr. Werner mentioned the *Grundig* case in EEC as being somewhat unfavorable to industrial property rights in that jurisdiction. But, of course, we have also had the *Parke Davis* case which is somewhat more

favorable since it held that a drug put on the market in Italy where there is no patent protection for drugs could be stopped from coming into Holland where there was protection, notwithstanding the provisions of the Common Market Treaty providing for free flow of goods. In other words, there are still some cases where a patent right may be used to prevent free flow of goods, provided, of course, that the restrictions do not go beyond a valid patent right.

As far as the European patent itself is concerned, it seems to me that what has caused the difficulty there is extreme complication. As I recall it, there are about 217 sections, many very complicated. There was to be a European patent and also retention of national patents. There were various license restrictions, and there was this tremendous question of accessibility: whether other countries who are members of the Paris Union, such as the United States, but which were not in the European Community, would or should be able to take advantage of any European patent that was devised. All of this, I think, has made the European patent somewhat moribund at the present moment, although it is still being considered.

As a matter of fact, the fact that other European countries, such as Holland, Germany and France have gone right ahead with revision of their own national laws and with provision of features like the deferred examination without waiting for the European patent, shows I think, that the European patent is not too close to reality.

Mr. Werner also mentioned the question of electronic retrieval systems and their application to patent searching. In this connection, I imagine what he had in mind was some previous very interesting remarks by General Sarnoff who was Chairman of the Board of RCA and previous recipient of the Kettering Award.

In his speech which, I believe, was the speech he made in receiving the Award, he mentioned this tremendous capability of electronic devices whereby in millionths of a second information could be stored and retrieved, and he said,

> These very systems can be combined to perform all the technical functions for a world patent center that could receive and process applications from inventors everywhere. This center would be the focus of the world patent system, linked to all countries by high capacity satellite communications and built around a large data processing and information storage system.

Really centralized searching may ultimately lead to that, and the Examiner in the U.S. Patent Office can press a few buttons and get an examination report and a state-of-the-art report from some central system in a few seconds or hours rather than six or nine months. General Sarnoff went on to say:

> The novelty and patentability of the idea could be determined within an infinitely shorter time than is now the case—and it could be determined on a worldwide rather than simply on a national basis.

I agree almost, but not entirely, with General Sarnoff. Where he says the novelty of the idea could be determined in a marvelously efficient and quick way, I agree, but where he says the patentability of the idea can be determined in this way, I must respectfully disagree. If the French theory and philosophy of inventions, for example, are different from the German theory, and the United States theory, and the Brazilian theory, we cannot determine patentability by a computer.

We can determine novelty by a computer, but not patentability. Mr. Werner said the ultimate goal is that of a single patent which will cover the entire world. When we get to that stage, and I think it should be a goal for all of us, these questions of patentability differences will disappear.

We will then have one law on patents. We will have one court to interpret that law, and at that point we will have achieved our goal of a universal patent. In the meantime, I suggest, let us not give up the intermediate goal of a universal and preferably computerized determination of novelty.

We now go on to some speakers from a country which is extremely important in the patent field, that is Japan. Clear evidence of this is shown by the fact that in 1965, which is the last year for which I have statistics, over 200,000 applications were filed for patents and utility models. In the United States, as you probably know, about 90,000 patent applications were filed in that year. So almost twice as many were filed in Japan, even though these include utility models as well as patents, but the utility model in Japan is not something like design protection in the United States, but it is pretty close to a real patent. It might be called a petty patent. So, 200,000 applications show very great inventive activity in Japan.

Our first speaker from Japan will be the Honorable Tsutomu Hirabayashi, the First Secretary of the Embassy of Japan in Washington. Although I presume Mr. Hirabayashi is not now directly concerned with patent matters, he has a very important patent background both because he was for some years in MITI, the Japanese ministry which deals with the approval or disapproval of patent licenses—not only was he in MITI but he also was in the Japanese Patent Office itself. So I can hardly think of a better speaker to talk about Japanese patent matters than Mr. Hirabayashi.

JAPAN

TSUTOMU HIRABAYASHI

Thank you very much. Ladies and Gentlemen, before starting I would like to make two apologies. The first is that I have to ask your patience in trying to understand my poor management of English, which is a foreign language to me.

The second apology is that my presentation today is not directly touching on the subject of international arrangement for industrial improvement. I will speak about the administrative problems that the government of Japan is facing and, which I think is indirectly related to the matter of transfer of the technical information for economic advance.

In the past decades, Japan attained a remarkable progress in economic growth. Since 1955, Japan's GNP continued to increase by an average annual rate of more than 10 percent. Since 1956, Japan has maintained the position of the world's biggest shipbuilding country; since 1960, the biggest motorcycle manufacturer; and since 1962, the world's biggest camera manufacturer. Japan ranks the second, next to the United States, in chemical fiber production. Japan is the third biggest producer, next to the United States and Russia, of iron and steel, cement, paper and automobiles.

I do not intend to explain here in detail how a small country like Japan, which is about the size of the state of Montana and which started virtually from nothing after World War II, could achieve such economic and industrial growth. However, regarding the topic of today's meeting, I think it appropriate to point out that a keen interest in foreign technology, however new to the Japanese people; vigorous efforts to absorb such technology and know-how; together with successful assimilation of such foreign technology in Japan's own economic climate, were certainly among the most important factors which contributed to Japan's industrial growth.

The birth of modern Japan dates back to 1868, exactly 100 years ago, when the feudal administration of the Tokugawa Shogunate was forced to give up its closed door policy of 300 years. Before the shores of Japan were two black ships, the symbol of civilization of the overwhelmingly powerful, industrialized countries of the Western

world. The new national policy of the Emperor Meiji's government which followed was to open the doors to the outside world, while firmly maintaining the sovereignty and independence of the nation. To attain this objective, every possible measure was taken to absorb Western culture and civilization as much and as rapidly as possible.

In the process of such Westernization, the idea of industrial property rights was quickly introduced and a sound system of patent protection was considered to be vitally important for inviting foreign technology to Japan. The patent law was enacted as early as 1871, only three years after the Meiji Restoration.

The Commissioner of Patents must have been a very significant appointment, for Korekiyo Takahashi was appointed the first Commissioner of Patents, who later became the Prime Minister of Japan.

Although I am not an expert on patents, I am led to believe that our patent system is one of the most advanced. Japan is a member of the International Convention of Paris, and its patent law incorporates all the basic principles of the Paris Convention, and our experts say that they cannot think of any case where invention or technological information in a foreign country would be discouraged from entering into Japan because of the lack of due protection to their industrial property rights.

So much for the patent system of Japan. Now, I think I should mention something about Japan's government policy concerning entry of foreign capital and technology into Japan.

Unlike the patent system, Japan is often criticized for its rigid and restrictive measures against introduction of foreign investment and technical assistance contracts. Most of these are subject to government approval, and its function is administered by the Ministry of International Trade and Industry. The Ministry is also responsible for export and import permits, and before 1964, when Japan took a step of a 94 percent liberalization of imports, MITI was notorious for its rigid import licensing. Now, the Ministry's notoriety is more related to its restrictive policies against foreign capital and technology.

As for direct foreign investment, Japan took its first step toward liberalization in June 1967. Fifty fields of industry were announced as liberalized, 17 of which were opened to 100 percent foreign capital and 33 to less than 50 percent foreign capital joint ventures.

The first liberalization step for the entry of foreign technology was taken very recently, i.e., June 1, 1968. By this measure, procedures for licensing technical contracts were much simplified, except for seven fields of industry which still remain subject to individual examination. They are: aircraft, arms and ammunition, gun powder, atomic energy,

space developments, electronic computers, and petrochemical industries.

As I explained earlier, Japan very much welcomes entry of foreign technology as it greatly contributes to economic growth and welfare of the nation. As a matter of fact, approval given to technological contract applications is showing remarkable increase in recent years. Before 1959, the average number of approvals per year was about 100. This increased to about 300 during 1960 to 1962, and in 1966 more than 600 were approved.

Perhaps, many people in foreign countries would not understand why Japan, which has already attained a high level of industrialization, must still maintain a licensing system on foreign investment and technology.

The explanation to such a question is that the licensing procedure is considered necessary under present conditions in order to safeguard against such undesirable entry of foreign technology as would jeopardize a sound development of their national economy.

Instances of such undesirable cases are:

(1) Excessive competition;
(2) Impact to small-scale enterprises;
(3) Discouraging technological efforts;
(4) Monopolistic contracts;
(5) Unduly one-sided contracts.

It will be necessary to make brief comments on these points:

First, on excessive competition. Needless to say, it is stupid for commercial firms to compete to an extent where the gains of the business are more than offset by the loss. However, this kind of stupid competition is prevailing in Japan in many fields of industry. When an application for an investment or a technological project is considered to stimulate such excessive competition, such an application may not be licensed.

Second, on impact to small-scale enterprises. Existence of a vast number of small-scale enterprises is certainly a most vulnerable problem which the Japanese economy is trying to solve. The government is asserting its utmost efforts to solve this by persuading or encouraging them to merge, amalgamate, or transfer to other lines of business. When the applying project is considered to bring detrimental effects on the administration of such small-size enterprises, it may not be licensed.

Thirdly, on discouraging creative technological efforts in certain fields of industry, government policy is set up to encourage creative development of industrial technology. It may be desirable or even

indispensable from an overall standpoint of national economy. When the application of a technological contract falls in this category, it may not be licensed.

Fourth, on monopolistic contracts, when the applying project is considered to involve unduly monopolistic characteristics in certain basic industries, it is considered detrimental to a sound development of national economy and may not be licensed.

Lastly, on unduly one-sided technological contracts, because of power relationships between the foreign and the domestic enterprises, the applying contract might contain unfavorable clauses on sales, marketing, et cetera. Such applications may not be approved.

As you hear these explanations, I presume that you are more and more inclined to think that the government of Japan, in this case MITI, is intervening too far in the private sector. There are such arguments even in Japan. Perhaps they may be right. However, in my opinion, it will take more time before we could let business go along without governmental guidance, before we could let capital and technological investment go uncontrolled. I do not think very many years are required for this. It could very well be two or three years, or four or five years at most. Thank you. (Applause)

MODERATOR GOLDSMITH: I want to say, if anybody has questions and if they will write them out and hold them up, we have some girls who will pick them up and bring them to me. We won't have too much time but we will certainly try to talk about any of the questions given us.

Again, referring to Mr. Hirabayashi, I certainly want to say that his English is really excellent and a thousand percent better than my Japanese or the Japanese of anybody in this audience. The only thing more remarkable than Mr. Hirabayashi's English is this rate of increase of GNP in Japan which is certainly remarkable.

It was also interesting to note that the first Japanese patent law was in 1871, only three years after the Meiji Restoration. This, it seems to me, plus what has happened following that Japanese patent law, is a complete answer to the question of patent laws in developing countries. Certainly, the presence of a patent law is important in introducing foreign technology and foreign capital as indicated by Mr. Hirabayashi. The only question is that too much capital finally comes in and then you have to put on these controls which you are doing at the moment, but which may ultimately be relaxed.

Another very interesting point in Mr. Hirabayashi's remarks was that the first Patent Commissioner way back in 1871, became the first Prime Minister. As he pointed out, this certainly shows how the Japanese felt, way back in 1871 as to the importance of a patent system. In this connection, I think I am correct in saying that our own Thomas Jefferson, President of the United States, was his own Patent Commissioner, so he thought it was a pretty important job, too.

One final comment, Mr. Hirabayashi made some remarks about antitrust which I would certainly respectfully request that the Department of Justice of the United States listen to and perhaps even copy. His remarks certainly were an expression of a rule of reason, because I gather that in Japan the antitrust requirements cannot be only against excessive combination, but also against excessive competition. I think that really is a rule of reason.

Now, I want to introduce M. Mizutori of the famous Mitsubishi organization in New York. Dr. Mizutori is not a patent man himself, but he will read a paper prepared by Shozo Saotome, the General Manager of the Patent Department of Mitsubishi Chemical Industries, Ltd., in Tokyo. (Applause)

DR. MIZUTORI: Mr. Chairman, Ladies and Gentlemen. As Mr. Saotome could not join this meeting, unfortunately, I am going to act as his proxy.

Present Situation and Prospects of Licensing in Technological Cooperation in Japan

SHOZO SAOTOME

LIBERALIZATION OF THE INTRODUCTION OF FOREIGN TECHNOLOGY

The Japanese government, in accordance with a report made by the Foreign Investment Commission, on the liberalization of license agree-

ments in introducing technology from abroad, put into effect a government ordinance for greater liberalization on June 1 of this year.

As Mr. Hirabayashi already explained, strictly speaking, this is not complete liberalization, but it may be said that almost all license agreements are substantially liberalized except for some relating to important industries. The main revised points are as follows:

(1) If payment is less than $50,000 per license, the license is automatically approved at The Bank of Japan within one month from the date of application, regardless of the kind of technology to be introduced.

(2) Even if payment is more than $50,000, in principle, approval will or should be granted automatically. The authority for such approval is also delegated to The Bank of Japan, provided, however, that in cases which are deemed to have a detrimental effect on the Japanese economy, case-by-case screening under instruction from the Minister of International Trade and Industry and the Minister of Finance, within three months from the date of the filing of application would be required.

(3) Licenses in atomic energy, cosmos exploitation, arms, gunpowder, airplanes, computers and petrochemicals are not liberalized and continued to be subject to case-by-case screening.

The views of the Foreign Investment Commission may be outlined as follows:

Faced with the interdependence of the economic communities of the world, Japan must strive for still greater development of her economy and the betterment of the living standard of the people. One year has already passed since the decontrol of foreign direct investment became effective.

During this one year foreign investors have been more active whilst the domestic shortage of manpower has become more acute. To meet these difficulties, Japanese enterprises are, irrespective of their size, urged to rationalize the way of management.

In order to accelerate the growth of developing countries, advanced countries agreed in principle to preferential duties upon products of such developing countries. Successive shock to the international monetary system since last year made close cooperation between advanced countries essential. Confronted by this situation, it is a pressing need for the Japanese economy to improve the quality of its products and reduce production costs through a higher technical level as well as through rationalization of the way of management.

The exploitation of self-developed technology is an elemental factor in raising the technical level of industry, and our government must

promote still greater efficiency in research development. At the same time, it is important to actively introduce, digest and make use of outstanding foreign technology. The introduction of outstanding technology raises the technical level not only of the enterprise which introduces it, but also promotes the rationalization of enterprises and results in better living conditions of the people by supplying less expensive products of high quality.

Further, the export of new products manufactured by using introduced technology contributes not only to the improvement of the balance of the import and export trade, but also to that of the importing countries. Our country ought to expand the areas and scope of technological development by exchanging technology with foreign industries and thereby contribute to the world economy.

The introduction of foreign technology has progressively been liberalized. It was owing to unavoidable circumstances that a case-by-case screening system still remained in the decontrolled program of 1963. It was feared that firstly, newly formed enterprises by introduced technology would intensify uneconomic competition peculiar to Japan and exercise undue pressure on small and medium business; secondly, that the introduction of technology would hinder and stagnate the commercialization of home technology; and thirdly, that monopolistic introduction would check the development of important industries.

As Japanese enterprises became conscious of the importance of technological introduction and cultivated their own ability, the severe regulations have been gradually eliminated. Nineteen hundred sixty-six was the starting year of the simplification and speed-up of examination procedures. As a result, more than 90 percent of applications have been approved so far.

In view of the domestic and foreign circumstances now prevailing, it is generally considered that this is the time to advance a further step in relaxing restrictions and changing to a system where choice and decisions of technology to be introduced are entrusted to the independent judgment of enterprises.

However, the Japanese government still deems it necessary to control the introduction of technology in particular fields such as atomic energy, cosmos exploitation, et cetera. In other than the seven cited industries, where free introduction may affect our economy adversely, it is our government's intention to leave room for official discussion. Accordingly, in the present situation of our country, the remaining restrictions will gradually disappear as the efficiency of industry advances.

Effect of Technical Induction on the Japanese Economy

There is no doubt that the development of the Japanese economy since World War II is due to the introduction of foreign techniques. With the coming into force of the Foreign Investment Law in 1950, Japanese industries entered a period of digesting and absorbing foreign techniques in iron and steel, electricity, machinery, chemical and other industries. Especially after 1955, new techniques which were tied in with technical innovation created new industries, petrochemicals, high polymer chemicals, electronics and automation machinery are representative examples and have fundamentally changed the structure and constitution of Japanese industries.

With the creation of new techniques and new industries, equipment investments became active and when such equipment started operation, labor productivity rapidly increased. The growth of labor productivity in manufacturing during the period 1956-1966 was an average 9.4 percent annually of which 5.4 percent was due to improvement in equipment and 4.0 percent was due to process improvement.

A considerable portion of the process improvement was due to foreign technique, but the progress made by the Japanese compared with other countries was comparatively high, because the difference between Japan and foreign countries with respect to technique was greater, the potential market was also greater and could better absorb techniques. As a result, Japan's export expanded remarkably.

According to data compiled by MITI for the period 1950 to 1960, comparing the value of production for all manufacturing products and the value of production due to inducted techniques, there was an average growth of 21 percent for the former and 72 percent for the latter; the production percentage of inducted technique was 10.8 percent.

The induction of technique showed great effects from the standpoint of the international balance of payments. From MITI's statistics of 1951-1960, the value of export of products by inducted techniques was $1.5 billion (primary products only). Payments for the techniques were $300 million; imported materials and machinery required for production by inducted techniques was $380 million. Thus there was a balance of $800 million of direct foreign capital income. However, for domestic supply from the inducted technique, the production value amounted to $13.5 billion. This is 55 percent of the import for the past ten years.

The benefit derived indirectly was also large. The introduction of

new techniques stimulated research and development of related techniques which gave rise to greater economic effects. Good examples are the introduction of transistors, resulting in the development of transistor television, and volume production of chemical raw materials giving rise to the plastic industry.

According to a survey of the Nomura Research Institute, of 165 commercial products which had a high percentage of production, 68 were directly due to technical innovation. It showed that nine were domestic techniques, 51 were based on techniques which were basically indicated through know-how and then the techniques were further developed in Japan and eight were based on inducted techniques without any further development in Japan.

Originally inducted techniques have been improved to meet conditions in Japan with much effect. This was due to domestic techniques being stimulated by inducted techniques which promote research and development. This trend will increase and we are hoping it will eventually lead to creative work in Japan.

Development of Japanese Domestic Techniques in Exchange for Foreign Techniques

Though not entirely, restrictions by the Japanese government on the import of foreign techniques have been lifted. This makes it necessary for Japanese industry to develop its own techniques. This necessity will be more strongly felt and taken up as a subject to be studied by the government as well as by industry in anticipation of the second liberalization of the import of techniques in the near future.

Industrial competition has become progressively more severe internationally. Introduced foreign techniques must be sufficiently superior for the expansion of the industry. Unless industry can develop techniques worthy of cross-licenses with desired foreign techniques, it will not be able to import techniques in the future, resulting in a possible cessation of its expansion.

Also, without development of domestic techniques on an international scale, it will be impossible to expand and maintain sales in foreign markets, promote the export of products and carry out direct investment abroad. The above are the reasons why the rapid development of domestic techniques is called for in Japan to meet the liberalization of the import of foreign techniques.

For the development of domestic techniques in Japan, the following must be considered:

Firstly, close and effective cooperation between basic studies and commercialization, particularly between basic studies and development work, studies in commercialization, industrialization and application. British industry is not behind American industry in basic studies, the higher technological level of the latter is due largely to the difference in development work. This also can be applied to Japanese industry. In order to eliminate this weakness of Japanese industry, Japanese firms must reorganize themselves for efficient operation and limit research and development activity to important subjects only.

The government should support such research activity financially. It will also be necessary to raise the efficiency in organization and management in research on important techniques and science. The government should closely cooperate with research organizations of universities and private firms, thereby preventing the duplication of research work in the country. If part of research on important techniques is controlled by the government but committed to private firms, incentives must be given to these firms by such merits as ownership and profit initiators.

Secondly, in the management of research and development activities government and private firms should exercise efforts to improve management to the level prevailing in developed countries.

Larger funds are now required for research and development, particularly of techniques of importance. In research and development, the following methods should be used:

(1) Subjects should be limited to those urgently required;

(2) Standards should be set according to the importance, with priority given to the more important subjects; and

(3) A system should be introduced to evaluate the results of research and development at every possible stage, so that appropriation of funds will be decided and made at the right time.

Japanese industry is strongly interested in exporting products made by its own techniques and in licensing such techniques abroad. From developed countries, outstanding techniques should be imported in exchange for its own, thus developing new industries in Japan. To the growth of industry in developing countries, Japan should contribute by licensing techniques and exporting plants.

In exports of techniques and plants from Japan, the greater part goes to developing countries rather than to developed countries. In this connection, there is a problem which is too big for private firms to solve. Most developing countries desire imports of plants on credit or on payment in installments, with attendant risks beyond the capacity of private firms and for which government protection must be ob-

tained to some extent.

This situation has recently improved as the government has felt it necessary to study possibilities to expand exports by granting greater guarantees, thus foreshadowing a continuing expansion of exports in the future. However, countries to which Japanese techniques will be exported should facilitate imports by a reduction of tariff rates, alleviation of approval conditions for import contracts and improved capacity to absorb foreign techniques. Thank you. (Applause)

MODERATOR GOLDSMITH: Thank you, Dr. Mizutori. Your remarks were certainly right on the point of technology transfer which is one of the main subjects of this meeting, and I think we are indebted to you for indicating that this transfer of technology is a two-way street. It is not only transfer from us to Japan, but also from Japan to us, and from Japan to developing countries.

We now come to our last speaker, who is John J. Cooper the General Counsel of Varian Associates of Palo Alto, California. As Mr. Cooper is the discussant for our Japanese colleagues, we will have somebody from the Far West telling us about his experiences in the Far East.

Mr. Cooper is a California lawyer, a graduate of Stanford University, and he also has a Master of Laws degree in taxation from the University of Southern California. His company is involved in sophisticated electronics and this makes him a natural to be our discussant for Japan where sophisticated electronics are certainly as familiar as they are in California. Mr. Cooper. (Applause)

JOHN J. COOPER

SUMMARY

Japanese government investment restrictions preclude establishment of local manufacturing subsidiaries and limit licensing terms and conditions. The result is that in Japan overseas corporations are seeking equity rather than royalties for their technology. For a U.S.

corporation, coupling licensing with a joint venture enterprise in Japan requires special consideration of U.S. antitrust and tax aspects. Antitrust violations can occur with contractual restrictions limiting U.S. imports and exports. Both the tax-free exchange of patents and know-how for stock and capital gains licensing are available and desirable in a Japanese joint venture.

Thank you, Mr. Chairman, Ladies and Gentlemen. My task this morning is to amplify and expand the comments of the speakers. The thrust of the restrictions in Japan on foreign ownership and on the licensing of technology is to shape the method of exploitation of the technology in Japan by an overseas company. Thus I want to discuss these restrictions, the problems they create for the foreign company in carrying its technology to Japan, and the solutions that the overseas corporation has found in Japan.

The principal restriction in Japan, and the one that causes the greatest difficulty, is that a 100 percent owned manufacturing subsidiary is not available in Japan. Normally, a U.S. corporation can go abroad, organize a wholly owned company, transfer technology to the company, and manufacture and market its product. Such a company has not been available in Japan since 1964. Prior to that date it was possible to have a wholly owned subsidiary in Japan if the foreign company was willing to forego remittance rights, and a number of companies did just that.

Japan joined the International Monetary Fund in 1964. Pursuant to Article 8 of the Articles of Agreement, Japan agreed not to impose exchange restrictions on dividends and royalties. So, to protect the balance of payments in Japan, the emphasis shifted from restrictions on the outflow of foreign exchange to restrictions on the input of capital and technology. These points were discussed quite thoroughly this morning.

The applicable law in Japan restricting the importation of technology is the Foreign Investment Law. It applies to patent and know-how contracts with terms of more than one year. Because the International Monetary Fund agreement forbids foreign exchange restrictions on royalties and license fees, the Ministry of International Trade and Industry (MITI) necessarily plays an important role in the administration of this law and the validation of these contracts. Although the Japanese government cannot control royalty payments in foreign

currencies, MITI can limit industries, capital and technology entering Japan. MITI also can restrict their royalty rates and can fashion the terms and the duration of license contracts.

Licensing may not provide the best solution for exploiting technology abroad. It may be incompatible with the objective of the U.S. company to protect its market, not to create another competitor some place else in the world. In Japan, licensing also may not be satisfactory because of the limitation on the royalty and especially because of the limitation on the duration of the license. Licensing contracts in Japan will have a limitation on their terms of between five and ten years. Ten years is not a very long time for a patent or know-how license. The solution that U.S. and other overseas companies have found in Japan is the joint venture company with a license. This is because instead of a low royalty, short-term license the overseas company will obtain an equity participation for its technology, which is a substantially preferable arrangement.

The basic problem in this joint venture arrangement in Japan is that the foreign company will have no corporate control. Theoretically, it is possible to acquire a controlling interest, but practically the U.S. company or the other foreign company will be restricted to a holding of no more than 50 percent, and usually its equity will be less than that. As a result, contractual control becomes important. Contractual control in the negative sense can be gained in three ways: The first way is through the joint-venture contract with the Japanese partner. A second way is through marketing arrangements for products outside Japan. Finally, some control can be gained through licensing restrictions.

This brings us to U.S. antitrust prohibitions on licensing restrictions, and I will comment on them just very briefly, but first a comment on a problem facing the Japanese partner. The Japanese partner also is seeking to achieve certain objectives in the joint venture. Before making any substantial investment, the Japanese company will want a firm commitment from the U.S. side, a commitment that usually takes the form of an exclusive license. This exclusive arrangement should not by itself create any special U.S. antitrust problems, and may be desirable for U.S. tax purposes.

The U.S. company is going to be looking for restrictions on exports from Japan. MITI is going to be watching for these too! But, considering only the U.S. antitrust aspects on this point, if a restriction on the joint venture precludes exports to countries other than the United States, that will not be an antitrust restraint because it won't affect U.S. foreign commerce. If, however, the restriction is on exports

to the United States, that restriction does affect foreign commerce and must be tested under the antitrust laws. If the restriction can be supported under a U.S. patent right, then, of course, the joint venture is only agreeing not to infringe that U.S. patent. If it isn't part of a market allocation arrangement or a patent pool, the restriction is permissible. Even if there aren't any U.S. patent rights, such as where only know-how is involved, and the restriction can't be supported by the patent laws, still it may be upheld as legitimate covenant not to compete. There are a few cases supporting that position.[1]

Finally, I would like to comment briefly on the U.S. tax aspect of transferring technology to a joint venture in Japan. One principal way of transferring technology to the Japanese joint venture is through a tax-free exchange under Sections 351 and 367 of the Internal Revenue Code. There are many advantages in doing this.[2] One is that the stock may be received for the technology tax-free, that is, without tax on the value of the stock given in exchange for the technology. There are several business advantages to a tax-free exchange. One of them is that the income of the joint venture can be used for operational purposes and not to pay royalty. The tax-free exchange also solves the problems of low royalties and the limited term which exist in Japan. These limitations can work out very inequitably because the value of the technology could come late in the term when the license is at an end, and so is the royalty. On the other hand, where stock is issued for the technology, the owner of the technology gains something which goes on perpetually, and if the joint venture is successful, the equity value increases.

One problem in the tax-free exchange is the requirement or condition that the transfer be for equity, not cash. Under the Japanese Commercial Code, if property is transferred to a Japanese corporation, it is necessary that a court-appointed appraiser ascertain the value of the property being transferred for the equity. As a result, in Japan, the post-incorporation sale is the technique used for getting technology into the company for stock. The U.S. company transfers cash to the joint venture for stock and then sells the technology to the company for the cash. This meets the requirements of Section 351, as the Internal Revenue Service will treat this two-step transaction as the

[1] For an analysis of the antitrust aspects of foreign licensing, see Cooper, "Tax and Antitrust Aspects of Foreign Licensing Transactions," *UCLA Law Review*, Vol. 13 (1965), p. 25.

[2] For a detailed treatment of this topic, see Cooper, "Tax Aspects of Corporate Exploitation of Inventions and Know-How," *Southern California Law Review*, Vol. 38 (1965), p. 206.

transfer of the technology for stock.

The only other important condition to that ruling is that there be a transfer of the property. In the case of patents this requirement is easy to satisfy, as an exclusive license for the term of the patent makes a transfer of the patent. Know-how presents a more difficult problem and there has been a lot written on this. Revenue Ruling 54-56[3] is the controlling ruling here, but the *DuPont* case[4] in the Court of Claims is very important in that the ruling was derived from this case.

That ruling provides that if know-how really is a trade secret, it is "property" that can be transferred to the joint venture tax-free. If it is something less than a trade secret, whether it constitutes property for tax purposes depends on the facts and circumstances.

To make the transfer of know-how, the ruling requires, and the Court of Claims in the *DuPont* case would have required, that the transfer be perpetual, and that exclusivity be transferred with a covenant on the part of the transferor not to disclose the technology to another Japanese company.

One last word on taxes. Because of the way in which technology is exploited in Japan, a capital gains transfer may be possible. There may be a unique opportunity here because Section 1249 of the Internal Revenue Code, which came into existence with the enactment of the famous Revenue Act of 1962, precludes capital gains licensing from a U.S. corporation only where the foreign corporation is more than 50 percent owned by the U.S. corporation. That Section will not apply in Japan because the U.S. company is going to have a 50 percent-or-less interest in the Japanese joint venture.

The requirements for the transfer on a capital gains basis are the same as the requirements for a transfer on a tax-free basis. In Japan the big problem in capital gains licensing results from the restriction that MITI will impose upon the duration of the license. If one can get over the hurdle of the limited term, capital gains licensing in Japan is a realistic possibility. To solve that problem can be very desirable from a tax standpoint. These conclude my comments.

Thank you very much. (Applause)

MODERATOR GOLDSMITH: Mr. Cooper, thank you very much.

In the beginning of your talk, you told about all the troubles in

---

[3] 1964-1 *Cumulative Bulletin*, 4.

[4] E. I. duPont de Nemours & Co. v. United States, 153 Ct. Cl. 274; 288 F. 2d 904 (1961).

licensing and I was getting worried but, at the end of your talk, you gave us a tremendous number of helpful hints. My only regret is we can't stay here half an hour longer and listen to more of this advice.

I want to thank Professor Harris for arranging this meeting, and I want to thank all the speakers and discussants for speaking, and I particularly want to thank the Commissioner for giving us all this time in his crowded schedule. As you know, he will be leaving for Geneva very soon, and I think it is a tribute to us and to the Institute that the Commissioner has spent the entire morning here when I am sure he has a lot to do in his office. Professor Harris.

DIRECTOR HARRIS: Before closing I wish, on behalf of the Institute and The George Washington University, to express our deep appreciation to all the distinguished speakers, discussants, and moderators who participated in this two-day Conference. Your contributions, based on a wide background and broad experience, have made this Conference a success. I particularly wish to thank you, the audience, who braved the Washington situation, despite a melancholy press, to be with us. I hope you found the Conference as informative and interesting as I have; indeed, it will play an important role in planning our future research. The proceedings of the Conference will, of course, be published in *IDEA*. Copies of the proceedings will be sent to you upon request—so please fill out the request form you received with your program and leave it with us, if you wish to have the Twelfth Annual Public Conference Number of *IDEA* mailed to you.

Finally, but of great importance, we are deeply grateful to you who are members of the Institute, for your continuous interest and financial support: this is the fuel to the fire of our genius and makes our research possible.

Ladies and Gentlemen, the Twelfth Annual Public Conference of The PTC Research Institute stands adjourned. (Applause)

(Whereupon, at 1:15 p.m., the Conference adjourned.)