

INCREASING IMPORTANTANCE OF INTELLECTUAL PROPERTY
IN THE GLOBAL ECONOMY

I.

We are living in a "Golden Age" for intellectual property rights (IPRs). Bill Gates speaks of a new "Gold Rush." Others consider IPRs a new and different "Bull Market." Patent filings and issuances have been skyrocketing, so much so that there is talk of a patent "revolution," "explosion," "frenzy." The U.S. Patent & Trademark Office (USPTO) is granting now almost 200,000 patents, almost three times as many as in 1980. Trademarks have experienced a similar boom. And trade secrets are said to be the "IPRs of the new millennium and can no longer be treated as a stepchild."

The American Patent System was revitalized by the creation in 1982 of the Court of Appeals for the Federal Circuit (CAFC), considerable pro-patent legislation in recent years as well as less antitrust enforcement.

"Everything under the sun made by man" is patentable according to our Supreme Court interpreting our Congress (*Chakrabarty* decision, 1980). And as of 1998 even formerly unpatentable business methods and computer programs (algorithms) are now also patentable (*State Street Bank* decision, CAFC, 1998).

More than ever companies are built around patented technology. The rate of American innovation is soaring. "New ideas are fostered in America like no place else on Earth." (*US News & World Report*, 1/4/99, p.40) "U.S. entrepreneurs power era of unprecedented prosperity" (*USA TODAY*, 7/30/99, p.B1) "Innovate or perish" is the motto. In recent years, royalties obtained for licensing patents have exceeded the billion-dollar mark for companies such as TI and IBM and over 100 billion dollars for all U.S. industries.

And universities, not to be left out, have jumped on the bandwagon. They now obtain thousands of patents annually and conclude an equal number of licenses per year. And the amount of royalties universities reap from patent licenses is also soaring. Annual patent royalty revenues rose from \$275 million in 1995 to over \$1 billion as of 2001, with a couple of universities already garnering over \$100 million per year.

Courts read the riot act to infringers. Holding patents valid much more often nowadays, they award damages in the hundreds of million dollars and even exceeding a billion dollars. Preliminary injunctions and treble damages are no longer rare and permanent injunctions are no longer stayed during appeals. According to Eric Belt of Bromberg & Sunstein the "year 2002 was truly the year of the plaintiff in patent litigation. As a result, patents should become even more valuable as business assets in 2003 and beyond."

Thus, we now have in the U.S. a thoroughly pro-patent climate, where patents are more enforceable and valuable and it no longer pays to infringe like before when, in the unlikely event the patent in suit was upheld, only reasonable-royalty damages were assessed. Ronald Myrick of General Electric put it this way: "The attraction of IP is simple; it's at the forefront of the technology that's driving the world and IP is one of the unique entities in the law where you're actually creating assets."

II.

Similar developments and trends are afoot elsewhere on the globe. For instance, in Canada the Conference Board, after noting that Canada's "patentee-unfriendly regime" had discouraged innovation, recently stated "Innovation is now recognized as the major, if not the sole, sustainable source of economic growth and the major determinant of the wealth of a nation." And things are changing "South of the Border," too. Further proof of this came across my desk the other day by way of an article in *IP Worldwide*, entitled "Latin America begins to understand IP," which is said to be particularly true of Brazil, Mexico and Argentina.

is the best example
reversed. In the North/ South debate
In India of all places, there has been a sea change in how they view IP. ~~Until recently~~ India had spearheaded the opposition to patents, proclaiming that technology was the "common heritage of mankind" and should therefore be made available for free. Back in 1992, when I attended a WIPO program at the University of Delhi, there were very few in attendance and I was crucified for the pro-patent views I expressed. However, a couple of years ago when I attended an International Conference in India on Intellectual Property Education and Training, organized by WIPO, in cooperation with the Department of Secondary & Higher Education of the Government of India and the Indian Institute of Technology, it came as a great surprise to me that they had turned decisively pro-patent and were singing a different tune.

They were saying that now that "IP is available in abundance in India," IP is being taught in "all academic schools" under government sponsorship and IP institutes are springing up all over. The Chamber of Commerce is promulgating the slogan "Patent or Perish," the phrases "IP literacy" and "IP awareness" have become buzzwords and they are trying to "bring IP from a legalistic ivory tower down to the common man." What an about-face!

On a regional and global scale, harmonization of IP systems is advancing steadily and there is a growing literature on the coming "world patent." The latest piece of good news about harmonization is that there is "progress at last" regarding the removal of the language and enforcement roadblocks on the march toward the Community Patent in Europe. This is very good news indeed, inasmuch we are living in a "global village."

III.

As a follow-up on my comments about the growing importance of IP rights, let me now give you a few observations on their exploitation. After all, IPRs are not obtained

for vanity reasons. E.g. framing a patent and hang it in your study. Exploitation by way of licensing is a growing practice and trend, as I mentioned at the outset.

It will hardly come as news that we also have a new ball game in the field of intellectual property (IP) licensing and technology transfer. Years ago there was little or none of that. All product innovation had to be home-grown technology and the NIH (not invented here) factor played a big role. And, of course, there is often an innate reluctance to license because it is more rewarding by far to have an exclusive patent position on an invention and exploit and self-commercialize it than to license it out. Also there is the concern that licensing will set up a competitor.

Dupont, Westinghouse and others until just a few years ago never licensed in nor licensed out. CIBA-GEIGY didn't do so. When they were developing a product and a patent issued to a third party that had priority so that they were not going to have a patent position, they just scuttled the project. They did not even bother to inquire about the availability of a license. And licensing out — perish the thought!

Nowadays even a simple, straight-forward plain-vanilla patent, know-how or trademark license is practically a thing of the past; instead, complex and sophisticated hybrid agreements, option/license agreements; joint venture, corporate partnering, co-promotion or co-marketing arrangements; strategic alliances and consortium licensing are the order of the day.

And there are other very significant developments and trends in licensing attitudes and practices, in IP valuation and royalty setting or other *quid pro quo* choices, such as, e.g. cross licenses. And we have an entirely different antitrust climate where restrictions commonly found in license agreements are generally viewed as pro-competitive rather than anti-competitive and IP is considered property — as it should be — rather than a monopoly.

Well, this new climate, this new respect for IP, and the higher value of IP, does lead to new or greater incentives for R&D and other innovative activities because you know you can protect your IP and patent your inventions and the patents are going to stand up. The patents are going to be more valuable and we know that the patent system is a tremendous incentive to R&D and investments. Incidentally, according to the late CAFC Judge Rich, the patent system provides four incentives, namely, to invent, to disclose, to “invent around” and to invest and it is the incentive to invest, which is the most important one.

Conventional wisdom has it that the ratio of requisite investment in the three phases of product innovation from laboratory to market place, namely, invention, development and commercialization is supposed to be of the order of 1:100:1000, and this would support the thesis of investment incentive.

And of course, licensing, technology transfers and investments are ever so much easier to carry out and accomplish via patents and other IPRs as vehicles or bases. Indeed,

licensing is a very effective and civilized way of forming business relationships and transferring technology and by far preferable to infringement litigation, which is very much on the increase.

However, one attorney of a big New York law firm used to go around the country, giving talks at association meetings, particularly at meetings of the Licensing Executives Society (LES), on guess what topic? You won't believe this. It is "Patent Litigation and Trials: The Alternative to Licensing." Note he meant not just starting a lawsuit and then perhaps settling it but actually going through a knock-down, drag-out fight to the end in the courts. You have to understand he is with a big antitrust law firm whose business dried up when the Antitrust Division of the Justice Department went to sleep in the '80's. This forced antitrust lawyers to switch to IP litigation. And you thought licensing was the alternative to litigation because nobody wins in litigation except the lawyers, as they say.

IV.

This new climate has also led to higher *quid pro quos* and royalties. Clearly the stakes have gone up. In fact, there has been a lot of hype and hoopla about value extraction and monetization of IPRs. A dose of realism is therefore in order.

Contrary to common assumptions, it is not true that licensors can charge what the traffic will bear, licensors can recoup their R&D expenses, the cost of the development of a technology is a big factor, etc. Indeed, there is a limit to what a licensor can charge and most often it is the licensee's economics, not the licensor's, that controls the royalty determination. And isn't there a 25/75% rule? Isn't licensee entitled to the lion's share because of the greater risk he/she carries, especially with less-than-fully developed technology? And above all, when it comes to royalties less is more and greed never pays off. In my corporate experience, several agreements turned sour because the royalties were too high, the profitability was not there and the deals could not be sustained in the end. On several other occasions, agreements had to be renegotiated for lower royalties for the same reasons. In other words, they were not viable win/win license agreements to begin with.

Actually, the cost to licensor of the development of the technology is not a factor at all. The R&D costs of developing the technology are sunken expenses expended by the patentee/licensor whether or not it is licensed and, therefore, should not be considered in arriving at a suitable royalty. That is to say, the public's interest in buying a product is essentially unrelated to the cost of developing it.

Furthermore, we should not lose sight of Tom Arnold's "100 Factors Involved in Pricing the Technology License," tabulated and discussed in the "1988 Licensing Law Handbook." This is a handy checklist, even though not all factors play a role in a given technology license. Among the most important and weighty factors are: a) the stage of development of the subject technology (embryonic, early stage and untested v. tested and commercial); b) the strength of the IPRs (solid v. weak, easy to design around *vel non*); and c) the degree of exclusivity (exclusive v. non-exclusive).

And the fact that many operative clauses in a technology license have economic weight, as for example, payment structures and schedules, most-favored-licensee clauses, representations and warranties, etc. needs to be kept in mind, so that royalty setting is not the first task in licensing negotiations but the last one, one to be tackled only after all the terms have fallen into place.

V.

In IP licensing and especially patent licensing trade secrets cannot be ignored. Over 90% of all new technology is covered by trade secrets and over 80% of all license and technology transfer agreements cover proprietary know-how, i.e. trade secrets, or constitute hybrid agreements relating to patents and trade secrets.

As a practical matter, licenses under patents without access to associated, collateral know-how are often not enough to use patented technology, because patents rarely disclose the ultimate scaled-up commercial embodiments of products and processes. According to Homer Blair, “in many cases, particularly in chemical technology, the know-how is the most important part of a technology transfer agreement.” And Robert Ebish advises: “Acquire not just the patents but the rights to the know-how. Access to experts and records, lab notebooks, and reports on pilot-scale operations, including data on markets and potential users of the technology are crucial.” This is good advice because very few patents cover fully developed technology and hence are easily licensable. Moreover, according to Melvin Jager, “Trade secrets are a component of almost every technology license...(and) can increase the value of a license...up to 3 to 10 times the value of the deal if no trade secrets are involved.”

VI.

Well, these were a few of my musings and reflections — with others given in the attached “Credos.Insights.Truisms” — about the importance of IPRs and their exploitation in the global economy in a global village.

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KFJ/Ruh/4.8.03

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on

Intellectual Property Rights and Technology Transfer

- The defense of intellectual property rights today is the new frontier as were the human rights yesterday.
- An effective IP system is indispensable to technological development which leads to economic growth and social welfare.
- An IP system should be part of a country's infrastructure from the outset rather than something that one thinks about after reaching a fairly advanced stage of development (Robert Sherwood).
- There are no viable alternatives to the present patent system which is the only system "that is compatible with the system of market economy" (Professor Carlos Fernandez-Novoa).
- There is solid correlation between the quantity of investments that can be attracted and the quality of the patent system (Professor Mansfield).
- Of the four incentives provided by a patent system, namely, to invent, to disclose, to "invent around" and to invest, the incentive to invest is the most important.
- An IP system does benefit nationals, not just foreign corporation; after all there is genius and creativity everywhere but they need nurture.
- A patent and other IP are property and are not and cannot be monopolies (a patent does not take from the public and give to the individual; on the contrary, it takes from the individual and gives to the public).
- "Everything under the sun made by man is patentable" (U.S. Supreme Court in the Chakrabarty decision); hence, there should virtually be no exclusions of subject matter from patentability.
- Subject matter that is viewed as too important to be protected (e.g. pharmaceuticals) is, on the contrary, "too important not to be protected" (Professor Thomas Field).
- Some countries have gold, some have oil — and some have technology and those that have gold and oil do not consider them part of the "common heritage of mankind" and accordingly give them away for free (Naboth Mvere, former Controller of IP, Zimbabwe).
- The duration of a patent should be no shorter than 20 years from filing and preferably 25 years or more or provide for patent term restoration to compensate for regulatory and other delays.
- Lead times for commercializing inventions have become longer in all areas and not just the pharmaceutical area and hence conventional periods of three or four years till lapsing or compulsory licensing and short patent terms are badly out of step with present realities.
- Patents and trade secrets are not mutually exclusive but complementary; they "dovetail" (U.S. Supreme Court in the Bonito Boats decision); thus, the question is not whether to patent or to padlock but rather what to patent and what to keep a trade secret and whether it is best to patent and to padlock, i.e. exploit the overlap.
- "Trade secret law and patent law have coexisted in this country for over one hundred years..... the extension of trade secret protection (even) to clearly patentable inventions does not conflict with the patent policy of disclosure." (U.S. Supreme Court in the Kewanee Oil decision).
- Multiple forms of protection can and should be utilized and integrated by exploiting the overlap between the various IP categories, especially in modern fields of technology; this provides fall-back positions, achieves synergistic effects and thus optimizes exclusivity (Professor Jay Dratler).
- Technology transfers, licensing and investments are ever so much easier to carry out and accomplish via patents and other IPRs as vehicles or bases.
- Importation of technology leads not only to export of products but also to export of adapted, improved technology (reverse technology transfer).
- The days when technology transferors took advantage of transferees (in developing countries) are gone, the realization having taken hold that the only viable license is one that results from a win/win approach and passes the fairness test.