INTERFACE BETWEEN INTELLECTUAL PROPERTY AND INTERNATIONAL TRADE: AGREEMENT ON TRADE-RELATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS (TRIPS AGREEMENT)

by

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1. The Great Divide: From Rule Diversity to Convergence

If we compare international intellectual property before and after TRIPs we come across a whole world of difference.

Until the signature of the 1994 Agreement enormous rule diversity among the different States around the globe prevailed. True, there were the two Great Conventions, the one of Paris (1883) for industrial property and the one of Berne (1886) for copyright; but these confined themselves to providing a general framework which left ample room for individual Member States' choices.

In fact, the two Great Conventions did not even define what was the subject matter of the different IPRs; and, on top of this, they allowed Member States to make reservations for those features of conventional protection they did not favour. Therefore even the more internationally oriented features of the Conventions, and notably the National Treatment principle, did not go a long way in providing for a common denominator among the different States. In fact, while the NT principle states in so many words that all Member States are required to grant nationals and residents of another Member State rights not lesser than those accorded by the former State to its own nationals, this same principle does not prevent the same Member State to make choices—as to the subject matter of protection, its scope, its limits and exceptions, as well as to the term of the grant—which may well be at variance with those of the other States. In such a context the setting of "minimum standards" of protection, i.e. the establishment through conventional provisions of a minimum amount of protection to be respected across the

For a brilliant contrast of pre- and post-TRIPs international IP protection see now
J. BRAITHWAITE-P. DRAHOS, Global Business Regulation, Cambridge University Press,
Cambridge, 2000, 56 ff. Convincing pictures of the process which lead to the Treaty and of its
implications are to be found in C.R. MCMANIS, Taking Trips on the Information
Superhighway: International Intellectual Property Protection and Emerging Computer
Technology, in 41 Villanova Law Rev., 1996, 207 ss. and L.R. HELFER, Adjudicating Copyright
Claims Under the TRIPs Agreement: The Case for a European Human Rights Analogy, in 39
Harv. Int. L. J., 357 ff. (1998).

board by all signatory States, was the exception rather than the rule.² And even so, compliance with the (relatively few) binding rules of international origin was—to use a euphemism—limited, as the enforcement mechanisms provided by the two Conventions have never been resorted to in actual practice.

Now, if we turn our attention to post-TRIPs international IP protection, the picture is totally different. The subject matter is defined with a remarkable degree of precision for each kind of IP grant. Minimum standards are in turn set for each individual right. No reservation is allowed. This is understandably so, as TRIPs is part and parcel of the "entire package" feature of WTO instruments, which entails that no State can be a party to one agreement, and thereby enjoy the advantages it covets most thereunder, unless it accepts all the other agreements as well. A fortiori for each agreement acceptance concerns its entire contents "en bloc."

Against this backdrop, the classic NT principle as incorporated in Article 3 of TRIPs has acquired a novel dimension. Now nationals and residents of other WTO Member States enjoy a level of protection which is no longer left to the vagaries of municipal arrangements but rather is firmly linked to the common ground established by the Treaty.³ And NT is in turn complemented by another principle, the Most Favoured Nation clause (Article 4), which has been one of the cornerstones of international trade for over half a century now but never enjoyed any currency in the field of IPRs before being incorporated in TRIPs. In extending MFN to IP, sovereign states have in fact given up the power to decide on which other nations they are to bestow benefits and privileges in connection with technological and intellectual creations⁴: whatever more favourable treatment is agreed upon between two or more countries automatically extends to all the TRIPs signatories.

It has been suggested that IP protection has acquired "universal" character after TRIPs. I do not think that the expression is fortunate or even apt, as it tends to obscure the fact that the "territorial" character of IPRs, according to which whatever right an IP holder is granted flows from the sovereign powers of the State making the grant and therefore is confined to the geographical boundaries of the relevant State, is by no means

See Article 10bis of the Paris Convention and Articles 5, 7 and 6bis of the Berne Convention.

On the renewed meaning of the NT principle in the TRIPs context see especially
J. BRAITHWAITE-P. DRAHOS, Global Business Regulation, above at n. 1, 75 ff.

For a brilliant and imaginative treatment of the implications of the adoption of MFN in IPRs for regional arrangements (as the EU) see T. EINHORN, The Impact of the WTO Agreement on TRIPS (Trade Related Aspects of Intellectual Property Rights) on EC Law: A Challenge to Regionalism, in CMLR, 1998, 1069 ff.

overridden by TRIPs. In fact IPRs are still firmly territorial, even after TRIPs.⁵ However, their fundamentals—from subject matter and scope, to limits and term—have been largely harmonized, so that we could say that here what is called a process of *convergence* is at work.

This outcome is certainly hardly surprising. After all convergence has asserted itself as one of the most common features in institutional change around the globe in the period at the turn of the century.⁶

What seems remarkable to me is how this outcome has been influenced—rather than by the workings of what is called the paradigm of regulatory competition⁷—by a novel and distinctive feature: the impact of international trade law in the shaping of IPRs.

2. The impact of international trade law on IPRs

In my last words I did not imply that international trade law had not affected IPRs before the beginning of the Uruguay Round.

In fact such an implication would have been wrong: the interaction between IPRs and international trade law dates back to more than half a century ago.

It is rather regional integration efforts, in which the EU experiment is especially remarkable, which are leading to forms of erosion of the territorial character of IPRs: the Community trademark is an outstanding example of such a process. A totally different form of erosion of territoriality is brought about by the internet, in forms and outcomes which had not yet been envisaged at the time TRIPs were adopted: see D.R. JOHNSON-D. POST, Law and Borders: The Rise of Law in Cyberspace, in 48 Stanford L. Rev., 1996, 1367, especially at 1372-1376; T. BETTINGER-D. THUM, Territorial Trademark Rights in the Global Village – International Jurisdiction, Choice of Law and Substantive Law for Trademark Disputes on the Internet, in 31 IIC 2000, 162 ff. and P.E. GELLER, International Intellectual Property, Conflict of Laws and Internet Remedies, in EIPR 2000, 125 ff.

For a thoughtful analysis of the workings of institutional convergence across the different relevant fields (corporate law, competition policies, banking etc.) see the fine collection of essays in R. Dore and S. Berger (eds.), *National Diversity and Global Capitalism*, Cornell University Press, Ithaca, New York, 1996.

Which is currently resorted to by legal scholarship to elucidate the way in which legal orders change in response to the world's economic processes by showing how the different sovereigns compete with each other in supplying "optimal" legal rules to attract mobile capital (or, in other words, firms) to their jurisdiction. For a discussion of this approach (and of the alternative paradigm of "path dependency") see my *Intellectual Property Rights and Legal Order*, in *IDA*, 2001, 122 ff.

GATT itself concerned itself not only with the traditional tariffs barriers to trade—custom duties and quantitative restrictions—but also with non-tariff barriers. Therefore it had to deal from the very onset with those obstacles to trade which may derive from IPRs. These in fact grant their holder an exclusive right which is territorial in character, so that it may be exercised *inter alia* to prevent imports of protected goods from other countries. Now, the arising tension between the principle of free flow of goods on the one side and the legitimate protection of IP owners on the other is specifically addressed by the provision of Article XX (d) of GATT, according to which restrictions on trade deriving from the exercise of IPRs are in principle legitimate, unless they are used as a means of arbitrary discrimination or constitute a disguised restriction on trade.

This approach came to be viewed as inadequate, however, as in world trade export income generated by intellectual property increased dramatically and in some countries—notably the U.S. and, to a lesser extent, EU Member States—exports having significant intellectual property content climbed to account for up to 25% of the total.⁹

At this juncture, it was felt that here a barrier to trade was in place; but that such a barrier was totally different from the old ones, envisaged by Article XX(d) GATT. More specifically Western companies doing business abroad vocally complained "that their sales in foreign markets were being undermined by a combination of inadequate foreign patent protection, wholesale 'piracy' of copyrighted works, massive counterfeiting of brand name goods" and systematic misappropriation of proprietary know how; correspondingly the argument was forcefully made that jurisdictions failing to grant the "appropriate" level of IPRs protection, rather than acting rationally for the benefit of their constituency, were acting strategically, holding out in order to extract some undue advantage—a "free ride"—from the other players in the game. In this perspective, failure to grant "optimal" protection by reluctant jurisdictions was seen as causing an inflow of protected goods into the corresponding territories lower than the one which would have prevailed on a level playing ground and, therefore, as a new kind of non-tariff, non-technical barrier to trade. 12

See in this connection S. VON LEWINSKI, The Role of Copyright in Modern International Trade Law, in 161 RIDA 1994, 1 ff. at 11 ff.

For details see C.R. MC MANIS, *Taking Trips*, above at n. 1, 212.

As reported C.R. MC MANIS, *Taking Trips*, above at n. 1, 212.

As the application of the regulatory paradigm would have predicted: see *Intellectual Property*, above at n. 7.

See F. ABBOTT-T. COTTIER-F. GURRY, The International Intellectual Property System. Commentary and Materials, Kluwer Law Int., The Hague, London, Boston, 1999, 2. For a thoughtful analysis from an international trade economics perspective see P.J.D. SMITH, Are Weak Patent Rights a Barrier to US Export?, in 48 Journal of International Economics, 1999, 151 ff.

Two ways out of this disequilibrium have been identified over time. The first one consisted of unilateral action by more powerful States and organisations: domestic or regional trade measures intended to persuade countries failing to grant appropriate protection to remove this particular kind of barrier. The second one has been found at the multilateral level. And it consists precisely in the negotiation and in the adoption of an IPRs regime based on convergence rather than on rule diversity: the TRIPs Agreement.

3. Maximizing the benefits from TRIPs: some thoughts on (i) its domestic implementation

It has been argued that the process which led to the adoption of TRIPs does not satisfy the conditions required for democratic bargaining, i.e. adequate representation, full information and non-domination.¹⁴ Nevertheless, since multilateral action is without doubt preferable over unilateral action, the adoption of TRIPs has obvious advantages over this alternative.¹⁵

What is open to question is whether the benefits accruing from TRIPs are distributed symmetrically. However, it is my impression that TRIPs' contribution to international trade may in fact turn out to be greater and more advantageous to all the parties interested if a certain number of conditions is fulfilled. My idea in this connection is that TRIPs should be looked at as a building which is still being erected and which can accommodate a multiplicity of needs and contribute to truly welfare-expanding forms of international trade on condition that it is appropriately completed from within and from without.

For a forceful analysis of the shortcomings of TRIPs in each of these regards see P. DRAHOS, Negotiating Intellectual Property Rights: Between Coercion and Dialogue, Paper presented at the Oxfam-International Seminar on "Intellectual Property and Development: What Future for the WTO-TRIPs Agreement," Brussels, March, unpublished draft, April 2001.

On the U.S. Trade and Tariff Act of 1984 and the Omnibus Trade and Competitiveness Act of 1988 see F. ABBOTT-T. COTTIER-F. GURRY, *The International Intellectual Property System*, above at n. 12, 1575 ff. and C.R. MCMANIS, *Taking Trips*, above at n. 1, 212 f. On the Eu Council Regulation 3286/94 of December 22, 1994 and its predecessor Regulation 2641/84 see F. ABBOTT-T. COTTIER-F. GURRY, *The International Intellectual Property System*, above at n. 12, at 1608 and S. VON LEWINSKI, *The Role of Copyright*, above at n. 8, 63 ff. and 75 ff.

This is true, provided that more powerful actors abstain from resorting to unilateral action after entering a multilateral compact. This ought to be the case, at least in theory: it has been rightly argued (by C.R. MCMANIS, *supra* at note 1, at 246) that resort to unilateral action subsequent to adoption of TRIPs is in itself a violation of international law.

To substantiate this claim I will talk in succession about (i) implementation of TRIPs by domestic laws; (ii) its link with competition law; and (iii) revisions to TRIPs. And the analysis of these issues shall in turn lead me to a brief discussion of (iv) interpretation and application of TRIPS.

On the first issue, implementation of TRIPs by domestic legislation, I shall not elaborate much on the flexibility allowed by the TRIPs provisions. This is a principle which is well settled in the text itself of the Agreement¹⁶ and has been duly explored by the relevant literature¹⁷ and could well be confirmed by an analysis of the different national experiments in implementation (the results of which might at this stage well be organized in a comprehensive overview which, however, does not seem to be available yet in the scholarly literature I am aware of). The point I rather intend to make is that, if IP protection is to be used as a tool for wealth creation also for the benefit of less developed countries, then the time has come to look for legislative reform in areas which in some sense are at the periphery or even outside of the perimeter of what is traditionally understood as IP protection.

In this specific, if unusual, connection, I will make a few suggestions in areas which seem important to me, ownership of inventions generated by public research, use of IPRs by Small and Medium Enterprises, venture capital.

3.1. Universities, public research entities, even public hospitals are institutions in which even lesser economies do carry out a substantial amount of research; and where patentable inventions may quite often come up in the process.¹⁸

What happens if it is not clear whether the title in invention vests in the researchers (be they an individual or a group) or in the public institution?¹⁹ The worst outcome is

See recitals 6, 7 and 8, Articles 1, 7 and 8 of TRIPS.

See among others the very good essay by N. A. ODMAN, Using TRIPs to Make the Innovation Process Work, in The Journal of World Intellectual Property, 2000, 9 ss. as well as a few points made in South Centre, The TRIPs Agreement. A Guide for the South, Katowice, 2000, where, at 26, remarks on the admissible extent of flexibility in providing for reverse engineering concerning software for purposes of interoperability and interconnection. Specifically on this last issue see also MC MANIS, Taking Trips, above at n. 1, 245 ff. and J. BAND-M. KATOH, Interfaces on Trial: Intellectual Property and Interoperability in the Global Software Industry, Westview Press, S. Francisco, 1995.

Cf. for the UK K. HARVEY, Capturing Intellectual Property Rights for the UK: A Critique of University Policies, in A. WEBSTER-K. PACKER, Innovation and the Intellectual Property System, Kluwer, Deventer, 1996, 79 ff. For the U.S. R.S. EISENBERG, Public Research and Private Development; Patents and Technology Transfer in Government-Sponsored Research, in 82 Va. L. Rev., 1642 ff. (1996) and T.A. MASSARO, Innovation, Technology Transfer & Patent Policy, The University Contribution, in 82 Va. L. Rev., 1729 ff. (1996).

that the invention passes unnoticed, is not patented at all, as nobody wants to incur the cost of patenting if he is not sure of appropriating the corresponding benefit, i.e. ownership of the resulting patent certificate and of the corresponding income stream. The "best" outcome is that one of the researchers, who may act as a consultant to a large, possibly transnational firm in his private capacity, passes on all the information to such a corporate entity so that the latter may register. But even such a result is hardly satisfactory: the novel device or formula flows out of control of the organisation which has contributed the preconditions for generating it and the benefits are appropriated by other economies.

What is the way out of this unhappy situation? The German and the UK systems take care of the problem in two opposite ways: in Germany title is vested in the researcher, in the UK in the institution.²⁰

But in the end the two solutions, different as they may be in their starting points, generate the same outcome: the German individual holder is under an obligation to make the institution share in the benefits (royalties, price of assignment and the like) and the UK institution is under a corresponding obligation to do so in favour of the individual researchers. We may therefore say that those two apparently polar systems are in fact benefits-sharing schemes generating equivalent outcomes.

In fact both entail a big advantage: they provide an incentive not only for registration but also for the transition to the subsequent steps which lead to actual exploitation: as the individual researchers will mobilize their contacts to find private partners willing to develop the basic idea, so the institution is prepared to set up "liaison offices" to negotiate and administer outside licenses.

Here is therefore a first step to make: generate clear and equitable rules concerning title in inventions arising out of public research.

Some countries have done so. Others have put on their agendas additional legislative steps. Japan is giving incentives to its public researchers to set up commercial enterprises without relinquishing their university jobs.²¹ Italy is favouring the creation of private-public research spin-off companies; researchers are given incentives to take

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For an analysis in the Italian context see G. FLORIDIA, Ricerca universitaria e invenzioni brevettabili, in Il diritto industriale, 1996, 447 ff.

As illustrated by the brilliant lecture by W.R. CORNISH, Rights in University Innovations: The Herchel Smith Lecture for 1991, in EIPR, 1992, 13 ff.

D. PILLING, Japan's changing climate starts to bear biotech fruit, in Financial Times, February 7, 2001.

shares in them.²² May be here are some experiences which might be duplicated by developing countries.

Let me add that resort to the kind of formula I described might be improved in some ways in the context of developing economies. What about thinking that, if the invention passes the registration process in some foreign patent system which provides for prior examination of the validity of the invention, then all the registration fees are reimbursed by a State agency? This seems to me a possibility worth considering, at least in legal systems which do not yet know of rules against State aid.

We should also consider that a well designed system would have an additional benefit: as clear rules would lead to a flow of income to researchers, this kind of incentive might counter the tendency to the phenomenon of brain drain which is so detrimental to the best of non Western formation systems.

In the perspective we have here chosen, it should be noted that nothing in TRIPs prevents municipal legislators to adopt appropriate rules in domestic legislation in the above area and to implement them at the level of the relevant public institutions.

3.2. In many developing countries—if not in most of them—a vital contribution to the economy is made by small and medium enterprises (SMEs)

Various international fora—including the WIPO Milano Forum on Intellectual Property and Small and Medium-Sized Enterprises, held in Milan, February 9 and 10, 2001—have spelled out the policy implication of the role played by this vibrant sector of the economy: legislative reform should especially target the requirements and the needs of SMEs, rather then confining itself to implementing those provisions of TRIPs which are more likely to specifically benefit already well established or even dominant firms. Also international assistance—mandated under Article 67 of TRIPs—should be to a large extent directed to catering to the needs of SMEs.

Vast possibilities open up in this area. Many of those have been explored in details in various occasions. Attention has focuses on the advisability of making available digital technology to give SMEs user-friendly access services to international IP data bases in order to enable smaller business to build their innovation starting from state-of-the-art information of the relevant technology²³; on the opportunities opened by

² Act n. 297 of July 27, 1999 and Decree of August 8, 2000.

Specifically on the role played by WIPO's Impact project in this connection see the Italian Government position paper presented by C. BONACCORSI and others, *Intellectual Property*[Footnote continued on next page]

the possibility of resorting to multiple-registration devices for small-businesses associations, as in the case of collective trademarks²⁴; even on the possibilities opened for developing countries business by e-commerce.

However, I would in this occasion concentrate on a less obvious point. Typically SMEs' growth is subject to a harsh constraint: the difficulty of resorting to outside financing. The reasons of this bottleneck are many and vary in the different institutional contexts. One however is recurring: fledging business do not possess assets to offer as a collateral for loans from banks and other financial institutions.

This is exactly where IPRs may step in. They have proved appropriate collateral to fund growth in developed economies; and the same outcome may be obtained to propel cash strapped small business into the next stage of their development, if appropriate legislative steps are taken to enable use of patents, proceeds from copyright and even trademarks as collateral.²⁵

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Rights and Small and Medium Enterprises: An Agenda for the Future, at the WIPO Milan Forum on February 9, 2001.

I explored this issue in a paper presented at the WIPO Academy Session on Intellectual Property held in Geneva March 13-17, 2000.

In a way this suggestion (as well as the ones made at 3.1. and 3.3.) links to the general discussion about the rationale for patent protection. In this regard, while it is well established that patent protection, besides (i) providing an incentive for inventive activity ("reward theory") contributes also to (ii) disclosure of new technology ("disclosure theory") and even (iii) to its dissemination by reducing transaction costs for holders desirous to license it ("dissemination theory"), new insights have been added by those economist (as R. MAZZOLENI-R.R. NELSON, Economic Theories about the Benefits and Costs of Patents, in XXXI Journal of Economic Issues, 1998, 1031 ss., especially at 1033 and 1040 ff.) who have suggested that the understanding of (iii) should be broadened to include all the advantages both in the development and commercialisation stages of an invention implicit in securing title over an invention. Those go well beyond the traditional argument that patent protection facilitates enforcement of the limits of a license during and after the life of the contractual relationship, to include the (less obvious) benefits flowing from the possibility of using—as suggested in the text—title over the invention as an asset which can be revealed without losing its value in the phases during which financial support is sought and secured.

In this light, it might well be argued that, while the benefits of (i) could be very limited for developing countries, the benefits of (ii) and, particularly, of (iii) might, in the appropriate institutional context, turn out to be quite substantial and possibly of such magnitude as to offset the well known welfare costs of patent protection. For (mixed) empirical evidence of the relevance of IP protection for technology transfer see C.A. PRIMO BRAGA-C. FINK, The Economic Justification for the Grant of Intellectual Property Rights: Patterns of Convergence and Conflict, in (F.M. Abbott and D.J. Gerber eds.), Public Policy and Global Technological Integration, Kluwer, Deventer, 1997, 99 ff., at 114 ff.

It has also been argued that in some cases patent protection may also serve (iv) an "exploration control" function, giving the patentee a kind of hunting reserve for all the field around his basic

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3.3. The last remarks leads me the third point I wanted to make. In certain fields, like software development, IT and even more so life sciences, the risks—as well as the possible returns—may be very high it is therefore difficult to envision traditional financing, by banks and other non-risk taking institutions; and this hurdle cannot be overcome even though appropriate rules as to the use of IPRs as collateral, like the ones I mentioned earlier, are set in function.

In this area venture capital seem to me to be the option which makes the difference. However, venture capital may function only in a friendly regulatory environment. Appropriate tax rules for offsetting losses from one project against gains from another; light regulatory hand in authorisations must be coupled with appropriate rules on disclosure.

What I am trying to say here is that maximisation of the wealth creation potential of IPRs necessarily passes through legislative reform extending to sets and subsets of rules which are not, strictly speaking, concerning IP proper or related to it. IP can be turned into an engine of growth and contribute to a less asymmetrical increase of international trade if it links to institutions and practices and attitudes which are able to trigger virtuous circles²⁶; and, to enable this, legislative reform must include revision or refurbishing of areas which are complementary to IP and linked to the efficient exploitation of its results.

4. The (partly missing) link with competition law

It may well be that the potential of wealth creation and dissemination implicit in IPRs requires more than appropriate domestic implementation.

patents (see E.W. KITSCH, The Nature and Function of the Patent System, in 20 J. L. &E. 1977, 265 ff.). While the basic assumptions of this approach are increasingly questioned (for the reasons given a long time ago by the U.S. Supreme Court in Brenner v. Manson, 383 U.S. 519, 86 S. Ct. 103 (1966); an presently followed from very different perspectives by M. A. LEMLEY – L. LESSIG, The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era, in 48 UCLA Law Review, 2001, 925 ff., at 960 ff.; R. COOPER DREYFUSS, Examining State Street Bank: Developments in Business Method Patenting, in Computer und Recht International, 2001, 1 ff., at 3 f. and C.A. PRIMO BRAGA-C. FINK-C.P. SEPULVEDA, Intellectual Property Rights and Economic Development, TechNet Working Paper, 1998, 27 ff.), it should be noted that over protection as the one advocated by supporters of this rationale is clearly to the detriment of less-than-large players on the innovation scene and accordingly more than proportionally disadvantages less developed economies.

As is to be expected following the other paradigm of legal change I explored in *Intellectual Property Rights*, above at n. 7, i.e. path dependency.

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In fact it may be argued that, as I was saying, the TRIPs building needs being completed not only from within but also from without.

This is hardly surprising, as commentators have seen as implicit in the agreement "a mandate for continuing renegotiation."²⁷

If I were to say what is in my opinion the single most important chapter to be written in the TRIPs (and WTO) books, I would not hesitate. It is competition law or, rather, the insertion of an international instrument concerning antitrust in the present framework of WTO Agreements.

This is for a very simple reason. We cannot rely on the full wealth-maximizing potential of markets in the presence of too wide disparities of economic power between the participants. It is in fact well settled that markets can generate optimal outcomes to the benefit of all participants and of society at large only if excessive power is kept in check. This is why cartels, monopolies and abuses of dominant position are prohibited as market distorting features of the economic process.

In fact TRIPs itself recognizes this, as it expressly leaves room for antitrust intervention to check abusive behaviour by IP holders.²⁸

This approach is however insufficient. Exactly as IPRs do not automatically bestow market power, ²⁹ so market power may be conferred by factors other than possession of IPRs, as, again, the case of cartels, monopolies and mergers leading to economic dominance all too clearly show.

W.A. KERR, The Next Step will be Harder. Issues for the New Round of Agricultural Negotiations at the WTO, in Journ. of World Trade, 2000, 123 ff., at 125.

See Articles 8(2), 31, 40-41 of TRIPs. A very appropriate comment to these provisions is in N. A. ODMAN, *Using TRIPs*, above at n. 17, at 13, 15, 25 ff. and 30 ff.

As conclusively argued both by US Courts [Abbott Labs. v. Brennan, 952 F.2d 1346, 1354-55 (Fed. Circ. 1991), cert. denied, 505 U.S. 1205 (1992)] and by the guidelines of U.S. agencies entrusted with antitrust enforcement [U.S. Department of Justice and Federal Trade Commission Antitrust Guidelines for the Licensing of Intellectual Property-1995, in 4 Trade Reg. Rep. (CCH) 13.132 (April 11, 1995), Sec. 2.0; for a comment v. S. M. BIGGERS-R. A. MANN-B. S. ROBERTS, Intellectual Property and Antitrust: a Comparison of Evolution in the European Union and United States, in 22 Hastings International and Comparative Law Review, 1999, 209 ff. at 211 f. and 247 ff.].

It is therefore essential that market power is controlled not only at the domestic level³⁰ but also internationally³¹; and it is hard to see how this mandate may be easily dismissed in an era of globalization.

There are many means to accomplish this end. The least persuasive, at least in my opinion, ³² is the one favored by US authorities. These support the idea that "outbound" extraterritorial application of US antitrust law may accomplish this aim satisfactorily. ³³ I beg to differ: even though US laws have proved to be probably the most effective means devised to curb market power to this day, they did their job so well in the domestic sector. There is no proof that the same rules would prove as effective in the international arena; and, most of all, WTO and TRIPS entail a move away from unilateralism and an option in favour of multilateralism that prevents us from even considering leaving the job of keeping global markets open to the legislature and to the courts of one single Member State, however well equipped the same may turn out to be.

I would therefore prefer to argue that also antitrust must become a multilateral set of rules, administered multilaterally. It is well know that even from this initial starting point many different options dipart. May be the Draft International Antitrust Code (DIAC) favored by the group led by old and wise German professor Fikentscher³⁴ is based on too wide principles to be really workable; and the European approach, to build on a vast net of bilateral agreements as a starting point for a consensus-built antitrust regime, ³⁵ seems to me the most promising one.



Which can in turn be advantageously developed: see N.A. ODMAN, *Using TRIPs*, above at n. 17, at 15.

See in this connection also C.A. PRIMO BRAGA-C. FINK-C.P. SEPULVEDA, *Intellectual Property Rights and Economic Development*, TechNet Working Paper, 1998, at 36.

But the same opinion is authoritatively embraced by E.M. FOX, Toward World Antitrust and Market Access, in 91 Am. J. Int. L. (1997), 1 ff., 10 ff.

See the FTC Antitrust Enforcement Guidelines for International Operations, 1995, in conjunction with the applications of the "outbound territoriality doctrine" in the Kodak-Fujii proceedings, on which see G. HORLIK-Y.K. KIM, Private Remedies for Private Anti-Competitive Barriers to Trade: The Kodak-Fuji Example, in Int. Bus. Lawyer, 1996, 474 ff. and M.C. MALAGUTI, Restrictive Business Practices in International Trade and the Role of the WTO Organisation, in P. Mengozzi (ed.), International Trade Law on the 50th Anniversary of The Multilateral Trade System, Giuffrè, Milano, 1999, 609 ff., at 623 ff.

The text of DIAC is published in F.M. Abbott and D.J. Gerber eds., Public Policy and Global Technological Integration, Kluwer, Deventer, 1997, 285 ff. A vigorous defence of this text against its critics by W. FIKENTSCHER, The Draft International Antitrust Code (DIAC) in the Context of International Technological Integration, is in the same volume at 211 ff., especially 218 ff.

The European proposals for a Plurilateral Agreement on Competition and Trade (PACT) is in the WTO Document No. WT/WTGCP/2 of December 8, 1998.

And I welcome the news that precisely this approach is up for the agenda in the meeting scheduled later this year in Qatar to re-launch WTO negotiations.³⁶

5. Possible revisions in the fields of pharmaceuticals and of biodiversity

There are two other great issues which are up for renegotiation in the next WTO meetings which have an obvious connection with the interface between IP and international trade.

The first one concerns a very difficult issue; and it comes especially to mind in a conference held here in India. I refer to the question of availability of patented drugs. I will confine myself to saying that the proposal which seems most satisfactory to me is the one under which patenting for drugs should be admitted either for developed countries or for developed ones, but not for both³⁷; and, having said so much, I leave this issue open to the debate—which, I am sure, will be very hot on this point—and move on to the next.

Much has also been said in connection with patentability of life forms. Here Article 27(3)(b) of TRIPs grants an option between patents and an alternative system of protection; and the first thing to make sure of is that such an option is in fact still open.³⁸

What I should like to remark in this connection is that the question of patenting life forms—particularly in the agricultural field—links to the question of preservation of biodiversity. This is essential for the South of the world, which has preserved to the present time vast amounts of genetic resources and should not be deprived of the benefits flowing therefore by the simple device of patent ownership³⁹; but it is also essential for

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³⁶ F. WILLIAMS, Progress Made on WTO Agenda, in Financial Times of June 26, 2001. For additional details on the EU proposals in this fields see M. GANGI, L'iniziativa dell'Unione Europea per la realizzazione di un accordo multilaterale di regole sulla concorrenza nell'ambito dell'Organizzazione Mondiale del Commercio, in Dir. comm. int., 2001, 123 ff.

As suggested in great detail and persuasively by J. LANJOUW, A Patent Policy Proposal for Global Diseases, www.brookings.edu June 11, 2001.

As it would seem: see F.J. GARCIA, *Trade and Inequality: Economic Justice and the Developing World*, in 21 *Michigan J. on Int. L.*, 2000, 974 ff., n. 264 at 1042. In any event the obligation is extended to the year 2006 for least developed countries.

Literature on the practice of patenting South preserved life telle quelle or after altering it by means of genetic engineering is enormous. An excellent summary is T. COTTIER, The Protection of Genetic Resources and Traditional Knowledge: Towards More Specific Rights and Obligations in World Trade Law, in F. ABBOTT-T. COTTIER-F. GURRY, The International Intellectual Property System, above at n. 12, 1820 ff.

the rest of the world, as biodiversity is a typical public good, which has to be fostered for the benefit of all mankind and of future generations as well.

If preservation of biodiversity is an essential goal, then it might be argued that the alternative form of protection for vegetal matter should not be confined to plant variety protection (or breeders' rights, as they are also known). The provision for a wider form of protection, which sometimes is referred to as "farmers' rights" and which finds its legal support in another international instrument, Article 15 of the FAO International Undertaking, might be in place as well.

In fact, under the basic plant variety legislation, the UPOV Convention of 1961, a farmer who has purchased a protected variety may under certain circumstances be entitled to replant freely the next generation of the seeds he has purchased from the plant breeder into his own farming unit freely, thereby dispensing with the consent of the same plant breeder. This kind of exemption, however, may be insufficient to preserve biodiversity, as traditional farmers do not confine themselves to replanting the same seeds from one crop to the next one in their own farm. They also engage in what is known as seed exchange "across the fence," from one neighbour to the other. If I understand correctly, this practice 40—which takes place within the same community and is cooperative rather than profit oriented—is essential to preserve the vitality of the crops across their different generations; and contributes to genetic diversity.

If I have this right, then here we have the starting point to consider a possible link between Farmers' rights under Article 15 of the FAO International Undertaking and the *sui generis* regime to be instituted under the umbrella of Article 27(3)(b) TRIPs.

[[]Footnote continued from previous page]

Indian objections to patents concerning basmati rice, nim tree and turmeric are discussed in O. DAS, Patenting and Ownership of Genes and Life Forms. Indian Perspective, in 28 International Business Lawyer, 2000, 105 ff.

A variety of remedies may be put in place to prevent the occurrence of this practice, including: (i) the creation of data bases in writing to establish prior art and prevent misappropriation by means of patenting, along the lines of the Indian Traditional Knowledge Digital Library or TDKL and other experiences (referred to in detail by P. CULLET, Plant Variety Protection in Africa: Towards Compliance with the TRIPS Agreement, in Journal of African Law, 2001, 97 ff. at 114 f.); (ii) the inclusion in all relevant patent legislation of a requirement of indication of the source of the living materials (on which see my Trasparenza, biotecnologie e brevetto, in Politeia, 2001, 206 ff.); (iii) the requirement that publication of patent applications and the setting up of an opposition procedure is built into the patent laws of countries (like the U.S.) which up to now fail to provide therefor.

On which see P. CULLETT, above at n. 39.

In this connection let me next note that if a patent regime applied to agricultural living matter, then both re-planting seeds and seeds exchange would in principle fall under the definition of infringement. If a plant variety regime was adopted, then replanting might become legitimate under a farmers' exemption rule; but, as we have just seen, seed exchange would still constitute an infringement.

This means very plainly that if the provision of a *sui generis* regime for agricultural stuff, allowed by Article 27(3)(b), were fashioned only after the plant variety paradigm, the corresponding regime would not accomplish the aims underlying Article 15 of the FAO International undertaking.

How can we therefore devise a *sui generis* regime which may comply at the same time with the requirements of Article 27(3)(b) and be mutually supportive of Article 15 of the FAO International Undertaking?

If I may be visionary for a moment, I would suggest the following. Countries hosting traditional agriculture should provide for a dual *sui generis* regime. Such a regime should have a common denominator: immunisation from IP infringement action on behalf of non commercial, non profit and cooperative seed exchange. In analogy to copyright law doctrines, there should be a fair use defence from infringement claims, insofar the exchange is kept within the boundaries of traditional practices and does not entail manufacture and sale of propagating material in competition to the holders of the right. On top of this, protection would fall into two categories. First, farmers' rights, entailing participation to the compensation under schemes built under the aegis of Article 15 of the FAO International Undertaking. Second, plant variety rights, akin to the UPOV model. Candidates to protection might opt for one of the two alternatives; but both would be subject to the fair use defence, as stated.

Both the question of patent protection for drugs and of seeds regimes are thorny ones. But they share one important feature. Whatever solution is eventually adopted, it will have an impact not only at the intersection between IPRs and international trade but also on other areas of paramount importance: health policies, as far as drugs are concerned; and agriculture and biodiversity, as far as seeds regimes are concerned.

A very similar proposal is to be found in P. CULLETT, above at n. 39, at 112.

P. CULLETT, above at n. 39, seems to maintain that a claim to compensation, rather that a property right, would not meet the requirements under Article 27(3)(b). While the issue deserves being explored, I submit that a whole range of IPRs, particularly in the fields of copyright and related rights, are based on claims to compensation rather than property rights.

This is why I suggest that in both cases the fora in which the debate takes place should be widened, to include, besides WTO and WIPO, the World Health Organization in the one case and FAO in the other.⁴³

In fact here we are not just talking of markets and international trade but of difficult collective choices. And all relevant voices should be heard, so that TRIPs revision may incorporate those standards of fairness which our societies do share.

6. Final remarks

It may well be that, if we look at TRIPs in the perspective I suggested earlier, i.e. as a building in progress, to be completed from within and from without, our evaluation of its impact on international trade and on the asymmetries it may generate may change a little.

For sure, there is a feature in TRIPs which may not be lightly dismissed. It is a step away from unilateralism; and it brings the rule of law to bear not only on behaviour of lesser member States but also on the one of the bigger and more powerful ones.

Nor should we forget the role that interpretation and application of TRIPs may have in the years to come. What I would like to draw your attention to in this last regard is the importance of the diversity of points of view which are considered in decisions to be rendered under TRIPs dispute settlement system. In fact, it should be noted that in this connection interpretive practice may not be based only on the body of precedents developed in prior GATT disputes. TRIPS does not present a self contained set of rules, as it does accommodate in its architecture elements drawn from the various IP Conventions which are so to say incorporated by reference into it.⁴⁴ Therefore, for a balanced approach reference to prior national practice in applying these Conventions appears of obvious importance. At the same time, while cases of outright violation of NT, of failure to implement mandatory TRIPS provisions should not be easily condoned, matters like drawing the line between the scope of exclusive rights and limitations and exceptions to the same is a delicate exercise, which may require a balancing with such sensitive issues as freedom of expression and of competition, in which, as it has rightly been observed, ⁴⁵ regulatory diversity should be cherished.

In this connection see also the argument developed by P. DRAHOS, above at n. 14, at 11-12 and the remarks of F. GURRY at 2 of the June 2001 issue of the WIPO Magazine.

The point is developed by F.M. ABBOTT, WTO Dispute Settlement and the Agreement on TRIPs, in E.U. PETERSMANN (ed.), International Trade Law and the GATT-WTO Dispute Settlement System, Kluwer Int., The Hague, 1997, 415 ss.

⁴⁵ See L.R. HELFER, Adjudicating, above at n. 1, 432 ff.

Therefore it would seem to me that participation to the Panels and to the Appellate Body by jurist coming from all legal cultures should be considered an important step in the right direction.

