

Patent Harmonization under World Trade Rules

Steve CHARNOVITZ*

The idea of harmonizing national patent systems goes back over a century.¹ Yet progress towards that goal has emerged slowly. The Paris Convention for the Protection of Industrial Property provides only a small amount of harmonization and the Patent Cooperation Treaty of 1970 applies mainly to the intake end of the patent approval process.² The movement for harmonization received a big impetus in the early 1990s, however, from an initially unlikely source—the new World Trade Organization (WTO). The WTO rules on trade-related intellectual property rights (TRIPS) catalyzed important changes in national patent policies. Given the growing institutional strength of the WTO, it seems likely that additional harmonization will ensue.

The purpose of this article is to discuss recent modifications in the patent regime that were triggered by the trade regime. The article begins with a brief review of the state of patent harmonization before the advent of the WTO and then explains what changes the WTO wrought. The next section discusses the concept of patent harmonization and points out its advantages and disadvantages. The following section looks at the implementation of the new WTO patent rules in one country—the United States. The last section discusses the significance of the Trade-Related Aspects of Intellectual Property Rights Agreement for the patent regime.

I. INTERNATIONAL PATENT PROTECTION BEFORE THE TRIPS ACCORD

The Paris Convention of 1883, and its subsequent amendments, provides some harmonization. One of its achievements was to define a common priority date so that the inventor may file an application in any Member State and have the benefit of that same filing date when filing later in another Member State.³ The Convention

* Director, Global Environment & Trade Study, Yale University, New Haven, U.S.A.

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¹ Stephen P. Ladas, *The International Protection of Industrial Property*, Cambridge, Massachusetts, 835,1930.

² See Convention Revising the Paris Convention for the Protection of Industrial Property, 14 July 1967, 21 U.S.T. 1583; Patent Cooperation Treaty, 19 June 1970, 28 U.S.T. 7645.

³ Robert Patrick Merges, *Patent Law Policy*, Charlottesville, Virginia, 356, 1992; Convention for the Protection of Industrial Property, *supra*, footnote 2, at Article 4.

also required the principle of “national treatment” so that nationals of any party would enjoy the same advantages accorded by a patent-granting State to nationals of that State.⁴ In addition, the Convention requires some significant negative harmonization. For example, it forbids certain governmental practices relating to compulsory licensing and forfeiture of patents for failure to work the patent.⁵

While these provisions are significant, particularly for a late 19th century treaty, it is important to keep in mind what the Convention does *not* do. With one exception,⁶ the Convention does not require governments to establish or maintain a patent system.⁷ Nor does it set any minimum standards for such a system.⁸ Other attempts to promote international harmonization have fizzled. For example, in 1920, a treaty to create a Central Patent Bureau failed to come into force.⁹

One longtime impediment to harmonization had been the continued reliance by the U.S. government on the “first-to-invent” system, which differs from the “first-to-file” system used in almost all other countries.¹⁰ Despite recommendations from many quarters, the U.S. government had resisted conforming its laws. Some observers thought the Clinton Administration might embrace this needed change, but it apparently decided not to confront the small inventors lobby. The Administration also asked the World Intellectual Property Organization (WIPO) to delay further negotiations toward a new intellectual property treaty.

The Clinton Administration was able to slow down WIPO talks because the ongoing Uruguay Round trade negotiations had achieved a tentative agreement for a new TRIPS accord. Previously, the trade regime had included very little on intellectual property rights.¹¹ But in the 1980s, the Reagan Administration began looking at the anticipated trade talks as a vehicle for improving the protection of these rights. The U.S. goal was not patent harmonization *per se*, but rather a raising of the level of patent protection in other countries.

⁴ Convention for the Protection of Industrial Property, *supra*, footnote 2, at Article 2; Ladas, *supra*, footnote 1, at 169: pointing out that Article 2 does not purport to give to the persons protected by the Convention any further protection than the nationals of each country enjoy.

⁵ Convention for the Protection of Industrial Property, *supra*, footnote 2, at Article 5.

⁶ The Paris Convention requires contracting parties to grant temporary protection to inventions exhibited at international expositions: Convention for the Protection of Industrial Property, *supra*, footnote 2, at Article 11.

⁷ Ladas, *supra*, footnote 1, at 169: noting that a country may abolish all legislation on patents.

⁸ Anthony D. Sabatelli and J.C. Rasser, *Impediments to Global Patent Law Harmonization*, 22 Northern Kentucky Law Review 579, 591, 1995: noting that the Paris Convention does not set any meaningful standards.

⁹ Agreement for the Creation of a Central Patent Bureau, 15 November 1920, 1 Hudson 508.

¹⁰ Kim Taylor, *Patent Harmonization Treaty Negotiations on Hold: The “First-to-File” Debate Continues*, 20 Journal of Contemporary Law 521, 545, 1994: noting that the willingness of the United States to adopt a first-to-file provision remains central to any further patent harmonization negotiations.

¹¹ It is interesting to note that as early as 1921, bilateral trade treaties included commitments on patent protection. See Commercial Convention between Finland and France, 13 July 1921, 29 L.N.T.S. 447, 457, at Article 17: undertaking to “give effective application” to the Paris Convention of 1883.

Although there were ongoing negotiations within WIPO on many of the same issues later discussed in the Uruguay Round, U.S. and European officials chose the multilateral trade negotiations as the forum rather than WIPO.¹² This preference for trade negotiations stemmed from at least two factors. First, WIPO, being a United Nations agency, gives developing countries a strong voice. This was problematic, however, since many of these countries were opposing stronger patent disciplines.¹³ By contrast, the General Agreement on Tariffs and Trade (GATT) was a much smaller organization largely dominated at that time by the United States and the European Economic Community.

Another reason that trade institutions were used to strengthen TRIPS is that the WTO was slated to gain an unusually potent dispute settlement system. This system includes the possibility of trade sanctions against scofflaw nations.¹⁴ In the first intellectual property dispute to be adjudicated by the WTO, the panel ruled that India had not enacted adequate patent laws regarding pharmaceuticals and agricultural chemicals.¹⁵

The selection of GATT (rather than WIPO) as the forum also provided political advantages to U.S. government officials. Corporations and groups opposing patent-law revision were experienced in following WIPO affairs, but were less experienced in monitoring the GATT's trade negotiations.¹⁶ Thus, the U.S. government was able to make commitments to GATT that it would have had a hard time making to WIPO. In addition, legislative implementation of the GATT trade agreement in the U.S. Congress would occur on a "fast track" that would brook no amendments.¹⁷ This would make it easier to enact controversial provisions that might otherwise face rough sailing within the Congress.

Although it is part of the trade regime rather than WIPO, the new TRIPS accord makes a major contribution to conventional international law on intellectual property. According to Paul Demaret, TRIPS "represents, without doubt, the largest

¹² Frederick M. Abbott, *The Future of the Multilateral Trading System in the Context of TRIPS*, 20 *Hastings International & Comparative Law Review* 661, 664-65: noting that a central purpose of TRIPS was to move the centre of gravity for IP rights (IPRs) from WIPO to the WTO; Hans Peter Kunz-Hallstein, *The U.S. Proposal for a GATT Agreement on Intellectual Property and the Paris Convention for the Protection of Industrial Property*, 22 *Vanderbilt Journal of Transnational Law* 265-67, 1989.

¹³ Michael L. Doane, *TRIPS and International Intellectual Property Protection in an Age of Advancing Technology*, 9 *American University Journal of International Law & Policy* 465, 472, 1994: noting perception of the futility of achieving broad reforms in WIPO.

¹⁴ See Bal Gopal Das, *Intellectual Property Dispute, GATT, WIPO: Of Playing by the Game Rules and Rules of the Game*, 35 *IDEA* 149, 158, 1995: stating that the springboard of the trade-based approach was the concept of trade sanction.

¹⁵ N. Vasuki Rao, *India to appeal WTO Ruling on Patent System*, *Journal of Commerce*, 12 September 1997, at 4A.

¹⁶ Harold C. Wegner, *TRIPS Boomerang—Obligation for Domestic Reform*, 29 *Vanderbilt Journal of Transnational Law* 535, 547 n. 47, 1996.

¹⁷ See generally Steve Charnovitz, *The Future of Fast Track in U.S. Trade Policy*, 14 *International Trade Reporter* 655, 1997.

and most ambitious attempt to harmonize intellectual property rights on a world scale.”¹⁸ J.H. Reichman calls TRIPS “the most ambitious international intellectual property convention ever attempted.”¹⁹

The TRIPS Agreement has nine major provisions regarding patents. First, it requires parties to comply with the Paris Convention.²⁰ Second, it requires parties to provide national treatment with respect to patent protection.²¹ Third, it requires that parties make patents available “in all fields of technology.”²² (Technically patents need be available only to nationals of other WTO countries; but the practical effect is to extend patent rights for domestic citizens too.) Fourth, it requires that patent rights be “enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.”²³ Fifth, it establishes disciplines for governments that engage in compulsory licensing.²⁴ Sixth, it requires that the term of patent protection shall not end before a period of twenty years from the filing date.²⁵ Seventh, it mandates national enforcement of private patent rights.²⁶ Eighth, it provides a robust dispute settlement process.²⁷ Ninth, it allows developing countries to delay implementation of certain provisions.²⁸ With respect to provisions three to seven above, it should be emphasized that these requirements do not exist in the Paris Convention.

It may seem surprising that the GATT could secure deeper harmonization of intellectual property law than WIPO. After all, is it not just the same group of governments operating within a different building in Geneva? The answer is yes and no; consider these three points.

First, it was not really the same group of governments. As noted above, WIPO is a UN organization with near-universal membership. By contrast, at the beginning of the Uruguay Round, the GATT had only about ninety parties. Today, the WTO is much larger, but several key countries (e.g. China) continue to be excluded from membership.

¹⁸ Paul Demaret, *The Metamorphoses of the GATT: From the Havana Charter to the World Trade Organization*, 34 *Columbia Journal of Transnational Law* 123, 162, 1995. Although this article discusses only the part of TRIPS related to patents, it should be noted that TRIPS provides stronger international standards on copyrights and trade marks.

¹⁹ J.H. Reichman, *Compliance with the TRIPS Agreement: Introduction to a Scholarly Debate*, 29 *Vanderbilt Journal of Transnational Law* 363, 366, 1996.

²⁰ TRIPS, Article 2.1. Parties must comply with Articles 1-12 and 19 of the Paris Convention. The other Articles relate to institutional aspects of the Union for the protection of industrial property.

²¹ TRIPS, Article 3.1.

²² TRIPS, Article 27.1. Articles 27.2 and 27.3 provide exceptions where governments may exclude patentability. For a discussion of these exceptions, see M. Bruce Harper, *TRIPS Article 27.2: An Argument for Caution*, 21 *William & Mary Environmental Law & Policy Review* 381, 1997; Todd R. Miller, *The International Suture: A Comparative Approach to Patenting Methods of Medical Treatment*, 78 *Journal of the Patent and Trademark Office Society* 443, 1996.

²³ TRIPS, Article 27.1. See also Doane, *supra*, footnote 13, at 479: calling this a significant step toward establishing basic patent standards in international law.

²⁴ TRIPS, Article 31.

²⁵ TRIPS, Article 33.

²⁶ TRIPS, Part III.

²⁷ TRIPS, Part V.

²⁸ TRIPS, Articles 65 and 66.

Second, the institutional identity of negotiators can make a difference. In other words, negotiators from the trade ministries of Countries A, B, and C might reach a different agreement than negotiators from the patent offices of Countries A, B, and C. Governments often do not speak with a unified voice.

Third, the international organization hosting the negotiations affects the outcome. When negotiations are held within WIPO, the only cards on the table are national intellectual property laws. But when omnibus negotiations are held within the trade regime, negotiators can fashion packages involving tariffs, non-tariff barriers, investment, standards, etc. This makes it possible to achieve agreements that could not be achieved within narrower organizations like WIPO.

II. POLITICAL ECONOMY OF HARMONIZATION

In 1966, the (U.S.) President's Commission on the Patent System pointed to an ultimate goal of establishing a universal patent.²⁹ Thirty years later, the rationale for a universal patent may be stronger since we live in a more globalized economy. Although patents have always been national, such a system was efficiently sized at a time when economies were relatively closed and technology diffused slowly. Today, inventors can expect many of their inventions to be immediately usable throughout the world. As the number of countries for which an inventor seeks a patent rises, the costs of national filings and determinations rises proportionately.

Inadequate patent protection in external markets leads to a loss in economic rent to the inventor. This is purely a matter of distribution; it does not reduce global welfare. But in a global economy that has unharmonized patent protection, the incentives to inventors may be diminished so much that aggregate welfare is reduced. This could result from demoralization, that is, knowing one's invention is inadequately protected from being copied. It could also result from an inability to achieve economies of scale. For example, suppose the investment of a Swiss inventor can only be recovered through sales to a global market. If large portions of this potential market are lost due to free-riding infringement in other countries, then the inventor might rationally forgo the investment.

While these are good arguments for harmonization, there are also arguments against it. First, it is often assumed that patents are the best way to stimulate invention (or to address the market failure that hinders invention). Yet from an economic perspective, the explicit right of monopolization exacts a welfare cost. If it were possible to subsidize or reward the inventor directly with a prize, instead of giving him a patent, the deadweight loss from monopoly could be avoided. Thus, since patents may not be the first best method for stimulating inventions, it would seem wrong, *ex ante*, to require them.

²⁹ See Stephen D. Kahn, *The First-to-File Priority System: Possibilities and Problems*, 12 IDEA 944, 966, 1968.

The argument for harmonization also implicitly assumes that all countries are the same. But each country is different in the values and preferences of its citizens and in its level of development. There is no reason to assume that every polity would freely choose the same patent system. Forcing uniform regulation upon every country is likely to be inefficient.³⁰

Although policy uniformity is rarely the best approach, the case for it improves when governments pursue necessary co-operation to respond to global problems—for example, eliminating chlorofluorocarbons that deplete the ozone layer. Concerned nations might rationally seek to influence an unconcerned nation that wanted to persist in producing these dangerous chemicals. By contrast, there are no *physical* spill-overs involved in inadequate enforcement of patents; all effects are transmitted through the market. In that way, the harmonization of patent regulations is similar to the harmonization of labour regulations and different from the harmonization of environmental regulations when such regulations address trans-border effects.

A third problem with harmonization is that it is too rigid. Since no one knows what the ideal patent system is, governments should probably be encouraged to experiment and compete against each other. Theoretically, if a country operates an inadequate patent system, the denizen inventors will emigrate. Governments will respond to this loss of talent by correcting their patent policy. Yet in a rigidly harmonized system, such experience-driven corrections may not occur.³¹ Suppose the new twenty-year patent term mandated by the TRIPS Agreement proves to be too high. Changing this TRIPS rule requires a consensus of Members of the WTO.³² Thus, one holdout country (or 34 percent of WTO Members if a vote is taken), could keep all the others from lowering their patent term to a more efficient number of years.

In summary, TRIPS is a milestone in international regulatory harmonization. This new harmonization of “domestic” policy arose out of concern about unfair competition from countries that provided less protection to inventors. Because inventions are transferred across borders, trade policy was employed to force countries to adopt minimum standards for patent protection. Ironically, even though the WTO has no rules on domestic commerce or domestic property law, it mandates that every government make patents available to its own citizens (and to foreign citizens).

³⁰ See, e.g., Roger G. Noll, *Internalizing Regulatory Reform*, in Pietro S. Nivola (ed.), *Comparative Disadvantages? Social Regulations and the Global Economy*, Washington, D.C., 1997, at 326; noting that the focus of policy should not be to level the regulatory playing field but to let trade reallocate activity to low-cost sources of supply.

³¹ As David Leebron notes: “Once the harmonized rule is agreed upon, it may be very difficult to change. International representatives and bureaucrats might be less responsive [than national officials] to changing views and circumstances.”: David W. Leebron, *Lying Down with Procrustes: An Analysis of Harmonization Claims*, in Jagdish Bhagwati and Robert E. Hudec (eds.), 1 *Fair Trade and Harmonization* 89, 1996.

³² Agreement Establishing the World Trade Organization, Article IX:1. A voting procedure to permit decision-making by a two-thirds vote is also provided: *ibid.*, Article X:1.

III. LEGISLATIVE CHANGES IN U.S. PATENT LAW

The TRIPS Agreement necessitated several changes in U.S. law. One way of looking at this might be to view it as an international compromise. The U.S. government attained its main objective in TRIPS—that is, establishing a mechanism for tightening patent, copyright, and trade-mark law in developing countries. Then, in return, the U.S. government had to agree to make changes in U.S. law sought by America's trading partners.

Yet this description misses the political complexity. Some of the changes—most notably the twenty-year patent term from time of filing—are also beneficial to certain American interests (e.g. victims of “submarine” patents³³). So one should recognize that trade negotiations are also used to effectuate domestic policy reform. In other words, the U.S. government probably agreed to the twenty-year term in TRIPS as part of a strategy to accomplish this politically difficult amendment to U.S. legislation. The fact that trade negotiations are implemented on a fast track—which requires an up-or-down vote on the total package—made this gambit even more attractive.

The Uruguay Round Agreements Act (URAA) makes several changes in U.S. patent law.³⁴ Two will be discussed here. The first major change involves Section 104 of the Patent Act. Under the pre-1994 Patent Act, Section 104 provided that an applicant or patentee “may not establish a date of invention by reference to knowledge or use thereof, or any activity with respect thereto, in a *foreign country* . . .” (emphasis added).³⁵ The URAA modifies this by adding the qualifying phrase “other than a NAFTA [North American Free Trade Agreement] country or a WTO Member country” after “foreign country”.³⁶

This legislative change partially corrects the long-time discrimination in U.S. law against inventive activity in other countries. Although analysts have argued that

³³ Submarine patents is the informal name given to the situation in the United States when an “inventor” files a patent for a vague technology, but responds slowly to questions from the patent office. The patent application can sit for many years during which time the inventor watches technology develop and refines his invention description (in his patent application) to embrace this new technology. The patent application is secret during this period. Then after say fifteen years—after others have developed and begun to use the new technology—the initial inventor successfully completes his patent application and wins a patent. At that point, the patent surfaces, like a submarine. The companies using this technology are therefore infringing on his patent even though they may have independently invented the same thing and even though they never knew he had a patent application in process. The Uruguay Round patent law changes in the United States will make it much harder to have a submarine patent because the inventor gets only twenty years from date of filing, rather than seventeen years from the issue of the patent.

³⁴ Uruguay Round Agreements Act, P.L. 103-465, 8 December 1994, Title v, Subtitle C. This article focuses only on the major changes.

³⁵ 35 U.S.C. §104 (1988). This section provides two exceptions elaborated in §119 and §135.

³⁶ URAA, *ibid.*, §531(a). Section 104 was changed a year earlier in the North American Free Trade Agreement Implementation Act: see P.L. 103-182 §331.

the former Section 104 violated the Paris Convention by not providing national treatment, there was no technical violation because Section 104 applied to American and non-American inventors alike.³⁷ Neither inventor could establish a date of invention by reference to inventive activity outside the United States. Of course, this prohibition was more likely to hurt non-American than American inventors. It persisted in U.S. law because it gave substantial advantages to U.S. inventors engaged in interference adjudication with non-U.S. inventors.³⁸

The URAA change does not put the United States in full compliance with TRIPS however.³⁹ As noted above, TRIPS requires that patent rights be enjoyable “without discrimination as to the place of the invention”. Because the new Section 104 simply requires the U.S. Patent and Trademark Office to take account of inventive activity in countries that belong to the WTO, the U.S. law remains out of compliance with TRIPS. Inventive activity in non-WTO-Member countries (e.g. China or Russia) cannot be used to establish a date of invention. Thus, the United States maintains discrimination as to the place of the invention.⁴⁰ The Clinton Administration did not disclose this in reporting its implementing bill to the Congress.⁴¹ Indeed, the Administration stated incongruously that “fairness to both U.S. and foreign inventors demands a certain identity of treatment with regard to reliance on inventive activity in the United States or abroad.”⁴²

The second major change in the URAA involves Section 154 of the Patent Act. Before the URAA, the U.S. government granted a patent for seventeen years from the date of issue.⁴³ This length of seventeen years had been a fixture of U.S. law since 1861.⁴⁴ The new law provides a term of twenty years from the date of filing.⁴⁵ That this law changes a feature of U.S. patent policy in place for over 130 years demonstrates the impact of the Uruguay Round. The manner of amendment also suggests that Congress might not have modified this provision using the normal legislative process. While the use of U.S. legislation to implement an international agreement on patents is not novel,⁴⁶ the use of the fast-track process to change U.S.

³⁷ See Gerald D. Malpass, Jr., *Life after the GATT TRIPS Agreement—Has the Competitive Position of U.S. Inventors Changed?* 19 *Houston Journal of International Law* 207, 209-28, 1996: characterizing this provision as *de facto* discrimination. Malpass provides a clear illustration of this discrimination showing how a French inventor who is the first to file and the first to invent might lose an interference against an American inventor: *ibid.*, at 213.

³⁸ *Merges*, *supra*, footnote 3, at 361. See also *In re Hilmer*, 359 F.2d 859, 878: stating that certain acts in foreign countries cannot defeat patent rights.

³⁹ The Clinton Administration describes this change as “necessary to conform to Article 27.1 of the TRIPS Agreement ...”: see *Statement of Administrative Action*, reprinted in House Doc. 103-316, Vol. 1, at 656, 1000. This is true, but the change does not seem sufficient to conform to Article 27.1.

⁴⁰ Compare Malpass, *supra*, footnote 37, at 226-27: glorifying the new Section 104 as providing “true national treatment” and “extending the first-to-invent system to everyone”.

⁴¹ See generally *Statement of Administrative Action*, *supra*, footnote 39.

⁴² *Ibid.*, at 1001.

⁴³ 35 U.S.C. §154 (1988).

⁴⁴ See *An Act in Addition to “An Act to Promote the Progress of the Useful Arts”*, 2 March 1861, 12 Stat. 246, 249, §16: granting a seventeen-year patent term.

⁴⁵ 35 U.S.C. §154(a)(2) (1995); 108 Stat. 4984.

⁴⁶ See, e.g., *An Act to Effectuate the Provisions of the Additional Act of the International Convention for the Protection of Industrial Property*, 3 March 1903, 32 Stat. 1225.

patent law was unprecedented. (This occurred for the North American Free Trade Agreement in 1993 and then a year later for the GATT.)

Although several commentators have pointed out that the twenty-year term increases patent protection outside the United States,⁴⁷ fewer have pointed to the fact that it also increases protection within the United States. When this was debated during the Uruguay Round implementation process, most of the concerns expressed related to inventors who would receive a shorter term as a result of the change-over from date of issue to date of filing.⁴⁸ While there will be such losers,⁴⁹ the number of winners should outnumber them as the average patent now issues nineteen months after filing.⁵⁰ Thus, patents will last seventeen months longer on average.

The absence of a domestic debate in the United States on the wisdom of increasing patent protection is probably a manifestation of the fact that the completed Uruguay Round Agreement was a *fait accompli* when it reached the U.S. Congress. The Congress was not being asked to decide whether the length of the U.S. patent term should be raised by three years. Rather, they were being asked to vote on the entire Uruguay Round implementing legislation on a take-it-or-leave-it basis.

By contrast, if Congress had been considering a draft patent law to raise the term from seventeen to twenty years, one can imagine that there would have been a lot of discussion as to whether the period of monopolization should be lengthened. Obviously, patentees would prefer the longest term they can get. If there was going to be opposition to a higher term, it would have come from consumer groups or users of technology. Yet these groups tended to be supporters of the Uruguay Round package. So they did not raise any objections to the longer term. Thus, the economic effects of the increase in the monopolization received little attention in the Congress.

If it turns out that patent prosecutions for particular sectors (or particular patentees) take significantly longer than three years, the U.S. government could raise the patent term above twenty years to make up for such delays. Such action would seem to be consistent with TRIPS which requires only a minimum term of twenty years.⁵¹ This suggestion differs from the view of one commentator who posits that TRIPS requires a uniform patent life.⁵²

⁴⁷ See, e.g., A. Samuel Oddi, *TRIPS—Natural Rights and a “Polite Form of Economic Integration”*, 29 Vanderbilt Journal of Transnational Law 415, 439 n. 102, 455, 1996.

⁴⁸ John G. Byrne, *Changes on the Frontier of Intellectual Property Law: An Overview of the Changes Required by GATT*, 34 Duquesne Law Review 121, 129, 1995.

⁴⁹ The fact that five times the normal number of patents were filed the day before the URAA became effective suggests that many inventors perceived the new law as disadvantageous to them: Byrne, *ibid.*, at 130.

⁵⁰ Richard C. Wilder, *The Effect of the Uruguay Round Implementing Legislation on U.S. Patent Law*, 36 IDEA 33, 1996: pointing out that applications on average will receive a longer term since the average pendency is nineteen months.

⁵¹ TRIPS, Article 33. TRIPS Article 27.1 states that patent rights shall be enjoyable without discrimination as to the field of technology. This might be interpreted as forbidding non-uniformity of term length within a country—for example, a higher term for biotechnology patents than other patents. Moreover, TRIPS Article 33 speaks of the “term” of protection, rather than the “terms” of protection.

⁵² Oddi, *supra*, footnote 47, at 439.

It is interesting to note that the Clinton Administration did not change another provision in the U.S. Patent Act that puts foreign inventors (or U.S. inventors operating in a foreign country) at a disadvantage.⁵³ Under Section 102(g), an applicant is entitled to a patent unless, before the applicant's invention, the invention was made in the United States by another inventor. Thus, if the invention was made earlier, outside the United States, the applicant might still be able to get a patent.⁵⁴ The Clinton Administration made a conscious decision to continue this discrimination.⁵⁵

The recent legislative amendments may spur future changes in U.S. patent law. Harold C. Wegner argues that it has been the discrimination in Section 104 which undergirded the perceived advantage of keeping the first-to-invent system in the United States.⁵⁶ Now that this discrimination has lessened, one might see lower opposition to converting to a first-to-file system.

IV. IMPLICATIONS OF TRIPS FOR THE PATENT REGIME

Some commentators have characterized TRIPS as a clever acquisition of bureaucratic turf by the GATT. (Others have likened it to a theft of intellectual property in that the WTO copied other treaties.) However one characterizes TRIPS, it seems very likely that the trade regime will maintain an activist stance in intellectual property. In this new role, the WTO prescribes government regulatory policy. This differs from the traditional GATT role which was to prescribe deregulatory policy.

Most internationalists in industrial countries applauded the negotiation of TRIPS. The tighter enforcement of intellectual property rights was seen as being good for innovation and good for the multinational enterprises that support research. TRIPS was also seen as being good for developing countries by giving them greater access to technology and investment.⁵⁷ Technology and investment might flow less freely to developing countries in the absence of adequate protection of intellectual property.

⁵³ See generally Shayana Kadidal, *Subject-Matter Imperialism? Biodiversity, Foreign Prior Art and the Neem Patent Controversy*, 37 IDEA 371, 1997. Kadidal notes that the first U.S. patent law in 1790 did not contain geographic discrimination: *ibid.*, at 385.

⁵⁴ There would be other grounds for loss of right, for example if the invention was patented or described in a printed publication in a foreign country before invention by the applicant: see 35 U.S.C. §102(a).

⁵⁵ *Statement of Administrative Action*, *supra*, footnote 39, at 1001.

⁵⁶ Wegner, *supra*, footnote 16, at 544-45. See also Kate H. Murashige, *Harmonization of Patent Laws*, 16 Houston Journal of International Law 591, 614: predicting that significant opposition to harmonization in the United States will probably disappear.

⁵⁷ But see Edson K. Kondo, *The Effect of Patent Protection on Foreign Direct Investment*, 29 Journal of World Trade 6, December 1995, 97-98: finding no evidence that patent protection affects foreign direct investment; and Robert Weissman, *A Long Strange TRIPS: The Pharmaceutical Industry Drive to Harmonize Global Intellectual Property Rules, and the Remaining WTO Legal Alternatives Available to Third-World Countries*, 17 University of Pennsylvania Journal of International Economic Law 1069, 1121-24, 1996: stating that the claim that stronger patent protection fosters foreign investment is analytically suspect.

In the collective enthusiasm for TRIPS, however, little attention was paid to whether the GATT/WTO is the optimal institution to negotiate new intellectual property policy. There are at least two reasons to doubt that it is. First, the WTO (unlike WIPO) is a restricted membership organization. For example, despite years of trying to join, China is still being excluded. Second, the WTO is run by trade ministers who might be expected to weigh concerns about trade policy more heavily than concerns about innovation policy. There is little reason to be confident that trade ministers and bureaucrats will make the right decisions about international patent policy.⁵⁸ Third, the WTO is more open to influence by multinational enterprises.⁵⁹ This is not necessarily bad, but WTO policy-making may not be subject to countervailing influences by consumers, environmentalists, or indigenous farmers. The impact of TRIPS on biodiversity remains a controversial topic in environmental circles.⁶⁰

These institutional considerations would diminish if the WTO, after spurring WIPO to be more effective, turns the TRIPS accord over to it. But that does not seem likely. It seems more likely that future multilateral trade negotiations will be used to build upon TRIPS by establishing deeper international harmonization. Having grabbed this turf, the WTO is unlikely to relinquish it. Indeed, new issues are sure to flower. For example, the potential anti-competitive effects of patent licences may emerge as a "trade" issue when the WTO gets more involved in competition policy.

The U.S. Executive Branch will find WTO negotiations a convenient way to modify patent law because it can use the fast-track process to prod new legislation through the Congress. Fast track can also be used to harmonize U.S. law on trade secrets, even though this issue has traditionally been left to state governments.⁶¹ At present, the Clinton Administration has no fast-track authority. But it is anticipated that Congress will consider renewal later this year. Members of the patent bar will need to follow trade policy closely in the future.

⁵⁸ See Abbott, *supra*, footnote 12, at 675: noting that IPR officials are more accustomed to a sceptical public policy analysis of intellectual property protection than are trade specialists.

⁵⁹ See Oddi, *supra*, footnote 47, at 455: noting that the big winners in TRIPS would be multinational corporations in developed countries that create inventions and are heavily engaged in international trade.

⁶⁰ See, e.g., Vandana Date, *Global "Development" and its Environmental Ramifications—The Interlinking of Ecologically Sustainable Development and Intellectual Property Rights*, 27 Golden Gate University Law Review 631, 1997.

⁶¹ See TRIPS, Article 39, Protection of Undisclosed Information.

