Domestic Implementation of International Obligations: The Quest for World Patent Law Harmonization

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DOMESTIC IMPLEMENTATION OF INTERNATIONAL OBLIGATIONS: THE QUEST FOR WORLD PATENT LAW HARMONIZATION

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Abstract: Most all nations recognize the need to protect intellectual property in some form due to its potential value. In 1994, the signatory nations of the General Agreement of Tariffs and Trade signed the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs), an ambitious international convention that set forth an international baseline for patent, copyright, and trademark protection. In addition to providing procedures for the settlement of property disputes, one practical effect of TRIPs has been the harmonization of the world’s patent laws. In 1994, the United States passed the Uruguay Round Agreement Act, legislation that implemented several changes to domestic patent law required by TRIPs. Although opinions, especially those of developing nations, debate the fairness of TRIPs, the Agreement represents an effective balance among competing interests and a major step towards world patent law harmonization.

INTRODUCTION

The international protection of intellectual property has been a global issue of paramount importance since the nineteenth century. Nearly all countries acknowledge the need to protect intellectual property in some form, recognizing that intellectual property “is an asset derived from the discovery or creation of a new product, process, or information” that has commercial value. Since nearly all traded goods operate under patent, copyright, or trademark protec-

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1 International Treaties on Intellectual Property 1 (Marshall A. Leaffer ed., 2d ed. 1997) (providing that the first international agreements concerned with the international protection of intellectual property were the Union of Paris for the Protection of Industrial Property (1883) and the Berne Convention for the Protection of Literary and Artistic Works (1886)).

tion, the fair and economic conduct of international trade is dependent upon secure intellectual property rights.\(^3\) The protection of a nation's intellectual property rights abroad can be a critical issue in the development of that nation's economy.\(^4\) Lack of international protection for the products of intellectual property can result in the loss of millions of dollars in profits as a result of international piracy.\(^5\) Aware of the need to protect these valuable assets from piracy, the nations of the world sought to provide clear guidelines for intellectual property protection.\(^6\)

It is often difficult, however, to persuade a country to alter its intellectual property laws in order to protect the assets of its international trading partners.\(^7\) With the concerns of both developed and developing nations in mind, the signatory nations\(^8\) of the General Agreement on Tariffs and Trade (GATT) signed the Agreement on Trade Related Aspects of International Property Rights (hereinafter TRIPs or Agreement) on April 15, 1994, at the conclusion of the Uruguay Round of negotiations.\(^9\)

The TRIPs Agreement is commonly viewed as the "most ambitious international intellectual property convention ever attempted."\(^10\) By building upon the conventions of the past,\(^11\) the Agreement sets forth an international baseline for patent, copyright, and trademark protection, in addition to enforcement and dispute resolution measures.\(^12\) This Note provides a detailed analysis of the TRIPs provisions regarding international patent protection. Part I reviews the basics of patent law necessary to fully understand the TRIPs provisions regarding patent protection. Part II follows with a brief synopsis of the rele-

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\(^6\) See id.


\(^8\) For a listing of the countries that have accepted the Uruguay Round of GATT negotiations, see *INTERNATIONAL TREATIES ON INTELLECTUAL PROPERTY*, supra note 1, at 587.

\(^9\) Id. at 585.

\(^10\) Guist, supra note 3, at 70.

\(^11\) The Paris Convention and the Berne Convention are the major intellectual property conventions that preceded TRIPs. See *INTERNATIONAL TREATIES ON INTELLECTUAL PROPERTY*, supra note 1, at 1.

\(^12\) Lippert, supra note 7, at 273.
vant TRIPs provisions concerning international patent protection. Part III examines the U.S.' implementation of these obligations under domestic patent laws. Part IV seeks to answer whether the United States has implemented its international obligations under the TRIPs Agreement. Finally, Part V identifies relevant obstacles to world patent law harmonization and suggests methods whereby full harmonization may be possible.

I. THE BASICS OF PATENT LAW

A patent is a government grant of a monopoly on an invention for a term of years, after which, the technology enters the public domain. Patents protect the fundamental elements of inventions and emerging technologies and are available to protect either a product, machine, composition, or process. The patent not only describes the invention but also gives the owner the right to exclude others from producing, using, or selling the invention without consent. In order for an invention to be patentable, it must possess a minimum degree of non-obviousness, usefulness, and novelty.

Domestic patent laws have dual functions. They stimulate scientific research by rewarding inventors with limited monopolies on their inventions while fostering economic benefits for the inventors' nation. Without the security provided by the TRIPs Agreement against international piracy, the benefits provided by patents likely would be frustrated, and a nation's economy and trade ultimately would suffer.

II. THE TRIPs AGREEMENT

The GATT negotiations commenced at the conclusion of World War II, when the nations of the world recognized the desirability of

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13 See Welch, supra note 4, at 42.
14 MELVIN SIMENSKY ET AL., INTELLECTUAL PROPERTY IN THE GLOBAL MARKETPLACE 0.6 (1999).
15 Id.
16 Id. (explaining that an invention fails to meet the non-obviousness criterion if the differences between the invention and the prior art would be obvious to a hypothetical person skilled in the field to which the invention pertains).
17 See id.
18 See Welch, supra note 4, at 42.
19 See id.
international trade agreements.\textsuperscript{20} Established in 1948, GATT is a multilateral instrument governing international trade aimed at reducing trade barriers.\textsuperscript{21} The Uruguay Round, the most recent of several rounds of GATT negotiations, created the TRIPs Agreement.\textsuperscript{22} TRIPs is primarily the result of concern among developed countries that lobbied for protection against international piracy of intellectual property rights.\textsuperscript{23}

The Uruguay Round also established the World Trade Organization (WTO) to oversee GATT and TRIPs.\textsuperscript{24} Developed signatories support the WTO because it promotes enhanced enforcement of rights in developing countries by undertaking a proactive trade surveillance role.\textsuperscript{25}

The TRIPs Agreement, signed in 1994, formally recognizes the need to promote "effective and appropriate means for the enforcement" of intellectual property rights, and provides for "expeditious procedures for the multilateral prevention and settlement of disputes" relating to private intellectual property rights.\textsuperscript{26} The practical effect on patents has been the harmonization of the world’s patent laws.\textsuperscript{27} To this end, TRIPs requires that all signatories enact domestic legislation to implement the minimum levels of patent protection provided by the Agreement.\textsuperscript{28} Thus, developed and non-developed signatories alike must adhere to an international baseline for patent protection\textsuperscript{29} and ensure effective, expeditious, and impartial application of patent rights.\textsuperscript{30}


\textsuperscript{21} Id. at 126.

\textsuperscript{22} See id. at 126–27.


\textsuperscript{24} See G. Bruce Doern, \textit{Global Change and Intellectual Property Agencies} 93 (1999).

\textsuperscript{25} See id.


\textsuperscript{27} See Rotec Indus. v. Mitsubishi Corp., 215 F.3d 1246, 1251 (Fed. Cir. 2000).

\textsuperscript{28} See TRIPs Agreement, \textit{supra} note 26, art. 1 (1).

\textsuperscript{29} Lippert, \textit{supra} note 7, at 253.

\textsuperscript{30} O’Sullivan, \textit{supra} note 23, at 13.
The TRIPs Agreement also sets forth the criteria for patentable subject matter. Article 27 provides that, “[a patent] shall be available for any invention . . . in all fields of technology, provided that they are new, involve an inventive step, and are capable of industrial application.” Thus, TRIPs requires a patent be made available for any invention, product, or process, regardless of its field of technology. In addition, Article 27 sets forth clear guidelines for subject matter that may not be patentable. These exceptions include inventions necessary to “protect ordre public or morality,” “diagnostic, therapeutic and surgical methods for the treatment of humans or animals,” and naturally existing plants, animals, and “essentially biological processes for the production of plants or animals.”

Furthermore, TRIPs provides that the rights set forth apply to all Members, thereby disposing of the past use of reciprocity. Under the National Treatment clauses, each signatory is compelled to accord to the nationals of other Member States “treatment no less favorable than it accords to its own nationals” with regard to the protection of patents. Moreover, TRIPs applies the most favored nation principle in affording patent protection. Thus, with few exceptions, “any advantage, favour, privilege or immunity granted by a Member to the nationals of any other country shall be accorded immediately and unconditionally to the nationals of all other Members.”

TRIPs also sets forth the basic rights that must be accorded to each Member’s nationals. Article 28 provides that a patent grants an inventor the right to prohibit third parties from making, using, selling, offering to sell, or importing the subject matter of a patent. In

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31 TRIPs Agreement, supra note 26, art. 27.
32 Id. art. 27(1).
33 Id.; Guist, supra note 3, at 72. However, the TRIPs Agreement fails to define “invention.” Although patents traditionally are available for useful inventions, advances in biotechnology are blurring this line. CARLOS M. CORREA, INTELLECTUAL PROPERTY AND INTERNATIONAL TRADE: THE TRIPS AGREEMENT 198 (Carlos M. Correa & Abdulqawi A. Yusef eds., 1998).
34 TRIPs Agreement, supra note 26, art. 27(2), (3).
35 Id. art. 27 (2), (3)(a), (b).
36 See O’Sullivan, supra note 23, at 14. Reciprocity is defined as “the mutual concession of advantages or privileges for the purpose of commercial . . . relations.” BLACK’S LAW DICTIONARY 1276 (7th ed. 1999).
37 TRIPs Agreement, supra note 26, art. 3(1).
38 See id. art. 4.
39 Id.
40 Id. art. 28.
41 Id. art. 28(1).
addition, the term of a patent under TRIPs was extended to twenty years.\textsuperscript{42}

TRIPs provides for a delayed schedule for its entry into force in developing countries.\textsuperscript{43} Pursuant to Article 65, developing Members were entitled to delay implementation of TRIPs for four years.\textsuperscript{44} In the case of the least developed Members, application of TRIPs is delayed for ten years.\textsuperscript{45} The leniency expressed in these articles allows a developing country an opportunity to slowly adapt and further expand its economy prior to compliance.\textsuperscript{46}

These clauses represent the concessions made by developed nations in order to acquire the consent of the under developed Members.\textsuperscript{47} The developing Members, rightfully contending that stringent protection of intellectual property would further impede their development, initially believed that TRIPs would result in a loss of their sovereignty and increased dependence on more developed signatories.\textsuperscript{48} However, many such nations ultimately assented, believing that the potential gains from freer trade were "irresistible."\textsuperscript{49} Thus, immediate compliance with TRIPs was not required of all Members.\textsuperscript{50}

Enforcement provisions were considered essential to realizing TRIPs' intent.\textsuperscript{51} Article 41 provides that each Member "shall ensure that enforcement procedures . . . are available under [domestic] law so as to permit effective" and expeditious remedies against any act of patent infringement.\textsuperscript{52} Thus, all Members are required to ensure that enforcement procedures are available under their laws.\textsuperscript{53} Furthermore, many procedural safeguards are present in the Agreement.\textsuperscript{54}

\textsuperscript{42} TRIPs Agreement, \textit{supra} note 26, art. 33.
\textsuperscript{43} Id. art. 65 (2).
\textsuperscript{44} Id. Developed countries were required to comply with TRIPs' provisions by 1996, with developing nations' compliance delayed until January 1, 2000. \textit{Intellectual Property Rights}, at http://www.cid.harvard.edu.cidtradeIssues/ipr.html (last visited Oct. 25, 2000).
\textsuperscript{45} TRIPs Agreement, \textit{supra} note 26, art. 66(1).
\textsuperscript{46} See Guist, \textit{supra} note 3, at 79.
\textsuperscript{47} See Lippert, \textit{supra} note 7, at 273.
\textsuperscript{48} See id.
\textsuperscript{49} Id. at 273. Increases in trade actually may be the result of avoidance of the U.S.' "Super 301" processes, a process where the U.S. Trade Representative can withhold intellectual property trade benefits if countries present an unfair burden to American trade. \textit{Id.} at 273 n.152. For further information on Special 301 processes, see 19 U.S.C. §§ 2411–2420 (1994).
\textsuperscript{50} See Guist, \textit{supra} note 3, at 79.
\textsuperscript{51} TRIPs Agreement, \textit{supra} note 26, art. 41 (1).
\textsuperscript{52} Id.
\textsuperscript{53} See id.
\textsuperscript{54} See id. art. 41 (3).
Under TRIPs, all patent infringement actions must be: (1) decided on the merits; (2) in writing; and (3) reasoned only upon evidence after each party thereto is afforded an opportunity to be heard. In addition, a party is entitled to judicial review of administrative decisions. In providing remedies for a contesting state, judicial authorities are permitted to award judgment in the form of an injunction, damages, and even an order that the infringing goods be destroyed without compensation.

Moreover, the TRIPs Agreement formally recognizes the need for procedures for multilateral prevention and settlement of disputes. For example, TRIPs provides a suitable binding dispute resolution procedure that former international intellectual property conventions lacked. Under Article 64, the dispute settlement procedures set forth in GATT are made applicable to patent dispute resolution and are to be monitored by the Council for TRIPs. Furthermore, all signatories are required to abide by the decisions of the Dispute Settlement Body of the WTO. The Dispute Settlement Body, consisting of a panel of three Members to make initial decisions and another three Member appellate panel, possesses the authority to make findings or recommendations, and may authorize a country to take reprisals against an erring WTO Member.

Thus, the TRIPs Agreement laid the foundation for the international protection of patents. Not only were all signatories required to join the WTO, but they also were compelled to adapt their domestic patent laws, pursuant to TRIPs, in exchange for mutual protection of intellectual property. Some of these required changes, discussed below, compelled the United States to expand the scope of patent infringement actions, permit consideration of evidence of inventive ac-

55 Id.
56 TRIPs Agreement, supra note 26, art. 41(4).
57 Id. arts. 44(1), 45(1), 46.
58 See generally id.
59 See O'Sullivan, supra note 23, at 15.
60 TRIPs Agreement, supra note 26, art. 64(1),(3). The Council for TRIPs is a body that examines the scope and modality of complaints provided for under the Agreement. See id. art. 68.
61 O'Sullivan, supra note 23, at 15.
63 See generally TRIPs Agreement, supra note 26.
64 Byrne, supra note 20, at 129.
65 See generally id.
tivity abroad in patent prosecution, and expand the term of a patent to twenty years.66

III. DOMESTIC IMPLEMENTATION OF INTERNATIONAL OBLIGATIONS

Similar to any international treaty, TRIPs established international obligations for its signatories.67 These obligations are made binding upon WTO Member States through the force of international law.68 In the United States, however, the implementation of TRIPs faced certain obstacles because patent law is an area delegated to the U.S. Congress.69 As a result, TRIPs was not self-executing and required implementing legislation.70 Furthermore, under the U.S. Constitution, any treaty provision that is inconsistent with the laws of the United States is void.71

The Uruguay Round Agreement Act of 1994 (URAA)72 approved TRIPs and began the modification of domestic patent law in order to execute the U.S.' international obligations.73 This act was signed by President William J. Clinton on December 8, 1994, and included the required changes to U.S. intellectual property law in order to implement GATT and TRIPs.74 GATT, however, was not intended to trump domestic legislation.75 Section 102(a) of the URAA reinforces the premise that, "No provision . . . that is inconsistent with any law of the U. S. shall have effect."76 Thus, where a conflict arises, domestic, not international, law binds the courts of the United States.77

The URAA implemented several changes to domestic patent law.78 Among these were: (1) expansion of the scope of infringement

66 See id. at 129–30.
68 See id.
69 See U.S. Const. art. I, § 8, cl. 8.
70 See von Hase, supra note 67, at 108.
71 See U.S. Const. art. VI, § 1, cl. 2; see also 19 U.S.C. § 104 (1999).
74 Simensky, supra note 14, at O.6.
76 URAA, supra note 72, § 102(a).
77 See von Hase, supra note 67, at 111.
78 See generally URAA, supra note 72.
actions to include offers to sell;\textsuperscript{79} (2) the use of inventive activity abroad to satisfy the date of invention criteria for patent applications;\textsuperscript{80} (3) the extension of patent protection to a term of twenty years;\textsuperscript{81} (4) the publishing of patent applications eighteen months after filing;\textsuperscript{82} and (5) the creation of a provisional application.\textsuperscript{83} Only changes one, two, and three are discussed herein, as these are the modifications specifically required by TRIPs.\textsuperscript{84}

A. Offers to Sell

Prior to TRIPs, the United States stood apart from its developed peers in limiting suits for infringement to cases in which actual sales of patented inventions were alleged.\textsuperscript{85} Thus, prior to the 1994 amendments, the holder of a U.S. patent only had the right to exclude others from “mak[ing], us[ing] or sell[ing] the patented invention in the U.S.”\textsuperscript{86} This language was construed strictly so that neither intent nor preparation to sell would constitute infringement.\textsuperscript{87}

The U.S.’ trading partners, on the other hand, favored an expanded cause of action for infringement that included offers to sell patented inventions.\textsuperscript{88} For example, in the English case \textit{Gerber Garment Tech, Inc. v. Lectra Sys. Ltd.},\textsuperscript{89} the Patents Court held that mere advertising provided a cause of action for the infringement of a patented product.\textsuperscript{90} Moreover, countries such as France and Belgium also allowed a cause of action for offers to sell in their domestic patent laws prior to 1994.\textsuperscript{91}

\textsuperscript{84} See Byrne, supra note 20, at 131–33.
\textsuperscript{85} Rotec Indus. v. Mitsubishi Corp., 215 F.3d 1246, 1251 (Fed. Cir. 2000).
\textsuperscript{87} See Eli Lilly & Co. v. Medtronic, Inc., 915 F.2d 670, 673 (Fed. Cir. 1990).
\textsuperscript{89} 13 R.P.C. 383, 411–12 (United Kingdom Patents Ct. 1995), \textit{cited in Rotec Indus.}, 215 F.3d at 1251.
\textsuperscript{90} \textit{Id.}
Thus, as a result of pressure from the U.S.' trading partners, TRIPs required the implementation of domestic legislation that encompassed offers to sell. In 1994, Congress amended 35 U.S.C. § 271(a) to include offers to sell as an additional basis for infringement. Today, a court may find infringement when the first element of contract formation, the offer, is satisfied.

Proponents of the expanded protection assert that including offers to sell strengthens patent protection by giving the patent holder increased protection from a wider array of infringing activity. The goal of this expanded cause of action is the reduction of international patent piracy. Despite this expansion, however, the courts of the United States, while acknowledging that common law offers to sell would suffice for infringement, have construed some aspects of the amended statute narrowly. Although the statute fails to define "offer to sell," the courts have interpreted the statute to require the offer to sell to have occurred within the United States. In Rotec Indus. v. Mitsubishi Corp., for example, the Federal Circuit held that infringement could not be predicated upon acts or offers that occurred wholly in a foreign country. There, the court denied the plaintiff's request for relief because the defendant had made offers to sell a U.S. patented invention in China.

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92 See TRIPs Agreement, supra note 26, art. 28(1).
95 See Morishita, supra note 94, at 912.
96 See id. at 912 n.55.
97 See generally Rotec Indus., 215 F.3d at 1246.
98 See generally id.
99 Congress did not provide much guidance on what constitutes an offer except to say that the sale should "occur before the expiration date of the term of the patent." 35 U.S.C. § 271(i).
100 Rotec Indus., 215 F.3d at 1249 (citing Dowagiac Mfg. Co. v. Minnesota Moline Plow Co., 235 U.S. 641, 650 (1915)).
101 Id.
102 Id. Lower courts have followed this holding. In Ecological Sys. Tech., LP v. Wildlife Ecosystems, LLC, the court held that "offer to sell liability under the patent infringement statute is interpreted according to its ordinary meaning in contract law." 142 F. Supp.2d 122, 125 (D. Mass. 2000). "In analyzing whether a defendant’s conduct [amounts] to an offer to sell, [the courts look] for evidence that the relevant parties discussed price, quantity and delivery dates." Id. at 126. Compare with 3 D Systems, Inc. v. Aarotech Lab., Inc., 160 F.3d 1373 (Fed. Cir. 1998), where the defendant was held liable for patent infringement when he sent numerous letters listing the price and describing merchandise for sale to compa-
B. Foreign Activity

Unlike its trading partners, the United States awards a patent to the party who is the “first to invent.”105 Prior to TRIPs and its enabling legislation, the United States discriminated against foreign inventors by not giving consideration to inventive activity that occurred abroad.104 Thus, only when an inventor brought his work to the United States was the date of invention set.105

However, due to European trading partners’ objections to this rule, the United States was required to amend its legislation in pursuit of global harmonization of patent law.106 Although the “first to invent” criteria is still the norm, the 1994 amendment to 35 U.S.C. § 104 allows foreign inventors to rely on any inventive activity in any WTO Member nation to satisfy the invention date on a U.S. patent application.107

C. The Twenty Year Term

Prior to the passage of TRIPs, a patent issued in the United States was valid for seventeen years from the date of issuance.108 TRIPs extended this period to twenty years from the date of filing the application.109 This change was implemented by the 1994 Amendments to the Patent Act, 35 U.S.C. § 154.110

This modification has been controversial for several reasons, including the fact that the extension actually may result in shortened enjoyment of patent protection because the time period begins to elapse from the time of filing.111 Since TRIPs requires the patent term to commence at the date of filing, rather than the date of issue, the
IV. Has the United States Fulfilled its Obligations in Patent Protection and Harmonization?

There is little doubt that the TRIPs Agreement and the U.S.' implementation thereof represent positive steps towards the harmonization of world patent law. Much of the legislative activity that resulted from TRIPs has helped to reduce international piracy of patented inventions. In addition, many of the TRIPs provisions effectively balance the concerns of the diverse GATT signatories, including developed and non-developed countries, as well as among the United States, Europe, and Asia.

Not all GATT Member States whole-heartedly supported the WTO and TRIPs, however. Developing states initially supported TRIPs predecessor, the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations dedicated to promoting the protection of intellectual property, because its policies favored reduced adherence to international intellectual property laws, and thus promoted progressive growth and development. These countries argued that TRIPs is an instrument of the West created to assert unilateral property claims because products originating from the Third World do not meet the criteria for protection.

In contrast, the United States and Europe favored a stronger WTO and the TRIPs Agreement because of their desire to effectively and judiciously enforce patent rights through the WTO's dispute settlement procedures, particularly in key developing countries that had not rigorously enforced intellectual property rights. Proponents of international intellectual property rights assert that strengthening

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112 Id. Patent prosecution is the process of obtaining a patent from the U.S. Patent and Trademark Office. Robert P. Merges et al., Intellectual Property in the New Technological Age 134 (2000). The time and effort required to prosecute a patent varies immensely, ranging from two years in average cases, to decades in cases where several inventors claim they were the first to invent a particular invention. Id.

113 See supra notes 79–83 and accompanying text.

114 See Morishita, supra note 94, at 912.

115 See Doern, supra note 24, at 94.

116 See id. at 93.


118 Ewens, supra note 5, at 304.

119 Doern, supra note 24, at 93.
intellectual property rights creates only a transitional loss for developing countries while promising long-term gains of enhanced employment, economic development, and new innovations.\textsuperscript{120}

Arguably, TRIPs struck an effective balance among these competing concerns.\textsuperscript{121} In exchange for the pledge of under-developed countries to commence harmonization of their patent laws, those countries were given additional time in which to comply with TRIPs.\textsuperscript{122} This compromise reassured the developed nations of GATT that all signatories would be required to protect their lawfully held patents over time, while under-developed members were assured that their economic development would not be suppressed.\textsuperscript{123} At present, however, several developing nations that were required to be in full compliance by 2000 have indicated that they were not able to implement their TRIPs obligations as required.\textsuperscript{124}

In addition to providing equitable treatment for signatories, the TRIPs Agreement succeeded in harmonizing the criteria for patentable subject matter.\textsuperscript{125} Although Members do have some flexibility in determining what matters can be excluded from patentability,\textsuperscript{126} patents among all Members must be granted to any invention that is "new, involve[s] an inventive step and [is] capable of industrial application."\textsuperscript{127} Moreover, TRIPs allows for future flexibility by permitting Members to implement more extensive protection than is required by the Agreement.\textsuperscript{128} Thus, as countries further develop and recognize the need for greater intellectual property protection, TRIPs will adapt to those needs.\textsuperscript{129}

Furthermore, TRIPs compelled the United States to equalize the protection for patents afforded by many of its European trading partners.\textsuperscript{130} By requiring the inclusion of offers to sell as a basis for infringement, the United States conformed to the patent laws held by

\textsuperscript{121} See TRIPs Agreement, \textit{supra} note 26, art. 65.
\textsuperscript{122} See id.
\textsuperscript{123} See generally id.
\textsuperscript{124} Intellectual Property Rights, \textit{supra} note 44.
\textsuperscript{125} TRIPs Agreement, \textit{supra} note 26, art. 27.
\textsuperscript{126} CORREA, \textit{supra} note 33, at 193.
\textsuperscript{127} TRIPs Agreement, \textit{supra} note 26, art. 27(1).
\textsuperscript{128} Id. art 1(1).
\textsuperscript{129} See id.
\textsuperscript{130} See id. art. 28(1).
many European nations. Thus, the European Members of WTO gained further protection for their patents within their countries and in the United States, while the United States, TRIPs' chief proponent, received similar protection.

V. IS WORLD PATENT LAW HARMONIZED?

Despite its ambitious provisions, TRIPs has had notable shortcomings, and in these respects, has had limited success in harmonizing world patent law. The major obstacle in the harmonization of patent law has been the U.S.' refusal to shift to a "first to file" system of patentability. While many European nations have implemented a "first to file" system of patentability, the United States persistently differs by maintaining its system of "first to invent." This difference has resulted in numerous "disputes among native and foreign inventors," involving the question of which party merits a patent for its invention.

TRIPs has attempted to remedy this obstacle to the extent possible by requiring the most favored nation status and through compelling the United States to consider inventive activity abroad. While not perfectly harmonized, these adaptations seek to level the playing field between these opposing systems. However, further disputes may be inevitable.

Another shortcoming of TRIPs that has prevented the full realization of international patent law harmonization is that the Agreement fails to mention the European Patent Office (EPO). The European Patent Convention (EPC), which created the EPO, was signed on October 5, 1973. The EPC sought to unify patent law

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131 See INTERNATIONAL PROTECTION OF INTELLECTUAL PROPERTY, supra note 88, at FRA. 11, BEL. 9.
132 See TRIPs Agreement, supra note 26, art. 28.
133 See Byrne, supra note 20, at 135.
134 Id.
135 See id.; see generally INTERNATIONAL PROTECTION OF INTELLECTUAL PROPERTY, supra note 88, at FRA. 6--10.
136 Byrne, supra note 20, at 135.
137 See TRIPs Agreement, supra note 26, art. 3(1).
139 Byrne, supra note 20, at 135.
141 INTERNATIONAL TREATIES ON INTELLECTUAL PROPERTY, supra note 1, at 673. The following states are party to the European Patent Convention: Austria, Belgium, Denmark,
within the European Community\textsuperscript{142} and permitted the EPO to issue a European Patent.\textsuperscript{143} While decisions emanating from the EPO indicate that there is a desire to apply the EPC in conformity with TRIPs, it is not clear whether TRIPs is binding on the EPC.\textsuperscript{144} In \textit{IBM/Computer Programs}, the EPO's Technical Board of Appeals, while accepting TRIPs with reservations, indicated that, "it [was] not convinced that TRIPs may be applied directly to the EPC."\textsuperscript{145} Thus, because the EPO is not a Member of the WTO and did not sign the TRIPs Agreement, only Member States and not the EPO itself are legally bound by TRIPs.\textsuperscript{146}

Although the EPO gives deference to TRIPs,\textsuperscript{147} the failure of TRIPs to reference the EPO represents a hurdle to the harmonization of world patent law.\textsuperscript{148} One might wonder how world patent law could ever be harmonized if the EPO, the body that issues patents for an entire continent, is not bound by the same standards as its Member States and their trading partners.\textsuperscript{149}

The WTO has a challenging task at hand, for it must continue to secure compliance with TRIPs provisions as well as address emerging issues in international intellectual property law.\textsuperscript{150} Some analysts assert that TRIPs implementation by under-developed Member States will have a devastating impact upon them.\textsuperscript{151} One feared impact is that TRIPs, in its promotion of patent right protection, will make pharmaceuticals more expensive in developing nations where the need for such medications is paramount.\textsuperscript{152}

Despite these concerns, business interests refuse to compromise, contending that enough additional time has been allocated to non-complying, under-developed states.\textsuperscript{153} In the future, TRIPs will be

\begin{footnotes}
\item[142] \textit{Id.}
\item[144] IBM/Computer Programs, [1999] E.P.O.R. at VII, 2.3.
\item[145] \textit{Id.} at VII, 2.1.
\item[146] \textit{Id.}
\item[147] \textit{Id.} at V.
\item[148] \textit{See id.} at VII, 2.3.
\item[149] \textit{See generally} IBM/Computer Programs, [1999] E.P.O.R. at VII, 2.3.
\item[150] Intellectual Property Rights, supra note 44.
\item[151] \textit{Id.}
\item[152] \textit{Id.}
\item[153] \textit{Id.}
\end{footnotes}
forced to adapt if it is to endure, and the WTO will need to find a method to arbitrate these competing interests.\textsuperscript{154}

CONCLUSION

TRIPs has been criticized as the direct result of a coercive strategy on behalf of the United States to force under-developed countries to pass laws that would protect U.S. patents. In spite of these criticisms, TRIPs remains an effective compromise that, while imperfect, has taken unprecedented steps towards the harmonization of world patent law.

One must remember in analyzing TRIPs that the Agreement foremost represents a compromise. As with any compromise, it balances the needs and desires of all Members in order to fulfill a common goal. Despite its shortcomings, TRIPs has led to a realization of many of its goals. Not only has TRIPs led to the increased protection of patents by recognizing an offer to sell as a basis for infringement, but the Agreement also has sought to treat all Member States equally by implementing the most favored nation status, while at the same time making concessions to those states in need of additional compliance time due to their socio-economic positions.

Furthermore, the United States, while differing from other Member States by maintaining its “first to invent” standard, has done its part to implement the goals of TRIPs effectively. With the several changes implemented by the 1994 amendments pursuant to the URRA, the United States has displayed its willingness to alter its domestic legislation in order to serve global and domestic goals. As a result, despite claimed coercive tactics, the United States has set the example for future international intellectual property protection.

\textsuperscript{154} See id.