

THE PATENT REFORM ACT OF 2007 AND INTERNATIONAL PATENT LAW HARMONIZATION

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“[I]t is desirable to harmonize for harmonization’s sake.”¹

I. INTRODUCTION

Although important progress has been made toward patent law harmonization in recent years,² many believe international patent law suffers from a plethora of disharmonious international patent systems that are incapable of resolving international patent issues efficiently.³ A more harmonized global patent law system will better serve the “international intellectual property regime”⁴ than the conflicting nationalistic patent systems that are currently in place.⁵ Indeed, the desire for global patent law harmonization was one of Congress’s incentives to initiate patent law reform efforts.⁶ To this end, on April 17, 2007, the 110th Congress introduced the Patent

1. Donald S. Chisum, *Introduction*, 26 J. MARSHALL L. REV. 437, 444 (1993).

2. Michael Kaminski, *Patents and Property: Patent Harmonization*, MODERN DRUG DISCOVERY, Jan. 2001, http://pubs.acs.org/subscribe/journals/mdd/v04/i01/toc/toc_i01.html.

3. See, e.g., Christopher D. DeCluitt, *International Patent Prosecution, Litigation and Enforcement*, 5 TULSA J. COMP. & INT’L L. 135, 135 (1997).

4. ROGER E. SCHECHTER & JOHN R. THOMAS, PRINCIPLES OF PATENT LAW 8 (2d ed. 2004).

5. DeCluitt, *supra* note 3, at 135.

6. See *infra* Part II.B.2.

Reform Act of 2007 in both houses.⁷ The House of Representatives passed its version of the bill on September 7, 2007.⁸ However, the bill that was introduced in the Senate has stalled and has been removed from the Senate calendar.⁹

This Comment focuses on the House of Representatives' version of the Patent Reform Act of 2007 and examines the Act's effectiveness at promoting global harmonization of patent systems abroad. Part II of this Comment provides a basic overview of the U.S. patent system; briefly examines the history, cause, and industrial impact of patent reform in the United States; and describes the U.S.'s role in the international intellectual property regime. Part III describes and analyzes key provisions of the Patent Reform Act of 2007; determines the effect of each provision on global patent law harmonization; and describes measures the United States has taken, or suggests measures the United States should take, to rectify those provisions that hinder global patent law harmonization. Finally, Part IV reflects on the overall effectiveness of the Patent Reform Act of 2007 and suggests that the executive branch's cooperation with Congress may facilitate the realization of international patent law harmonization.

7. JOHN R. THOMAS & WENDY H. SCHACHT, CONG. RESEARCH SERV., *PATENT REFORM IN THE 110TH CONGRESS: INNOVATION ISSUES 1* (2007).

8. Editorial, *Patent Fight: Why a Bill on Reforming Protection of Inventions Is Worth Watching*, WASH. POST, Oct. 8, 2007, at A16.

9. Emily Berger, *Patent Reform Act Stalls in the Senate*, ELEC. FRONTIER FOUND., May 2, 2008, <http://www.eff.org/deeplinks/2008/05/patent-reform-act-stalls-senate>.

II. REFORMING THE UNITED STATES PATENT SYSTEM AND FITTING INTO THE INTERNATIONAL INTELLECTUAL PROPERTY REGIME

A. *United States Patent System*

In the United States, Congress has the power to enact national patent laws.¹⁰ To this end, in 1952, Congress passed the Patent Act which is to a large extent still in effect today.¹¹ At a high level, the Patent Act explains the mechanics of the U.S. patent system.¹²

Because U.S. patent rights do not automatically arise at the conception of an invention,¹³ an inventor must submit a patent application to the United States Patent and Trademark Office (USPTO) in order to secure patent protection.¹⁴ Specifically, patent examiners at the USPTO review submitted applications and assess whether a patent should be issued.¹⁵ In particular, the claims¹⁶ are the most important component of the application for the patent examiner to review because each claim defines a scope of patented protection.¹⁷ As required by law, a claim must “particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his

10. “The Congress shall have Power . . . [t]o promote the Progress of . . . useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their . . . Discoveries . . .” U.S. CONST. art. I, § 8, cl. 8.

11. Patent Act of 1952, ch. 950, 66 Stat. 792 (codified as amended in scattered sections of 35 U.S.C.); see *Roberts v. Sears, Roebuck & Co.*, 723 F.2d 1324, 1330 (7th Cir. 1983).

12. See generally 35 U.S.C. §§ 1–376 (describing the process required to receive patent protection).

13. See John R. Thomas, *Collusion and Collective Action in the Patent System: A Proposal for Patent Bounties*, 2001 U. ILL. L. REV. 305, 309 (2001).

14. 35 U.S.C. § 111 (Supp. V 2005).

15. *Id.* § 131.

16. “A claim is a group of words defining the boundary of the patent monopoly.” 60 AM. JUR. 2D *Patents* § 359 (2003).

17. See *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 336 U.S. 271, 277 (1949) (noting that the claim measures the protection granted to the patentee).

invention.”¹⁸ Indeed, only the claimed language can potentially be infringed.¹⁹ Conversely, what is described in the patent, but not covered by any claim, cannot be infringed.²⁰

As a procedural matter, the Patent Act imposes a time bar limitation that must be complied with in order to obtain a patent.²¹ Specifically, in the United States, an inventor has one year from the date of certain triggering “prior art events”²² to file a patent application.²³ Prior art events that are capable of triggering the one year clock to file include patenting the invention, disclosing it in a printed publication anywhere in the world, and publicly using or selling the invention anywhere in the United States.²⁴ As previously noted, if the inventor fails to file within a year of any of these triggering events, no patent will be granted.²⁵ It is important to note that the inventor or *any third party* is capable of triggering the one year clock.²⁶ As such, whether the inventor is aware that the one year clock has been triggered is irrelevant.²⁷

As a substantive matter, there are several conditions precedent that must be satisfied before the patent examiner will allow a claim to the inventor.²⁸ For example, the invention must be patentable subject matter.²⁹ As such, the invention must either be a “process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.”³⁰ In this regard, “[t]he laws of nature, physical phenomena, and abstract

18. 35 U.S.C. § 112 (2000).

19. *See* *McClain v. Ortmyer*, 141 U.S. 419, 425 (1891).

20. *See id.*

21. *See* 35 U.S.C. § 102(b).

22. *Id.*

23. *See id.*

24. *Id.*

25. *See id.*

26. *See In re Epstein*, 32 F.3d 1559, 1564 (Fed. Cir. 1994).

27. *See* *Special Devices, Inc. v. OEA, Inc.*, 270 F.3d 1353, 1355 (Fed. Cir. 2001) (“[I]t does not matter who places the invention ‘on sale’; it only matters that someone—inventor, supplier or other third party—placed it on sale.”).

28. *See generally* 35 U.S.C. §§ 101–103 (2000).

29. *Id.* § 101.

30. *Id.*

ideas” cannot be patented.³¹ Also, the invention must be “useful, novel, and nonobvious.”³² An invention is useful if it is functionally operable and capable of providing a substantial and specific benefit;³³ novel if it is new when it is invented³⁴ and if the inventor timely filed his patent application;³⁵ and nonobvious if at its conception, it would not have been obvious “to a person having ordinary skill in the art.”³⁶ Further, the patent application must contain a written description providing language that will enable one skilled in the art to make and use the invention as well as the inventor’s “best mode” of implementing the invention.³⁷

Once the patent issues, the patent owner has the right to exclude³⁸ others from making, using, selling, offering to sell, and importing anything covered by a valid claim of the patented invention during the life of the patent.³⁹ As such, those who engage in these practices without a license are liable to the patent owner for infringement.⁴⁰ Remedies for the patent holder, in the event of an infringement, include an injunction against future infringements⁴¹ and damages for past infringements.⁴²

31. *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980).

32. *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1567 (Fed. Cir. 1983).

33. *See In re Fisher*, 421 F.3d 1365, 1371 (Fed. Cir. 2005); *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1358 (Fed. Cir. 1999).

34. An invention is new when it is invented if it has not been publicly known or used in the United States or previously disclosed in a patent or printed publication anywhere. *See* 35 U.S.C. § 102(a) (2000).

35. An inventor timely files his patent application if he files within one year of a prior art triggering event. *See supra* notes 21–26 and accompanying text.

36. 35 U.S.C. § 103(a). In order to conduct a nonobviousness analysis, “the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art [is to be] resolved.” *See Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

37. 35 U.S.C. § 112.

38. Granting a patent confers on the patentee a right of exclusivity, which runs from the issue date and expires twenty years thereafter. 35 U.S.C. §§ 154(a)(1), (2). Indeed, the inventor enjoys no rights while the patent is pending. *E.I. DuPont De Nemours & Co. v. Mallinckrodt, Inc.*, 654 F. Supp. 890, 907 (S.D. Ohio 1987).

39. 35 U.S.C. § 271(a).

40. *See id.*

41. 35 U.S.C. § 283.

42. 35 U.S.C. § 284 (Supp. V 2005).

B. Patent Reform in the United States

1. History

In 1981, the U.S. patent system lacked consistency and uniformity⁴³ because the regional courts of appeals, which had jurisdiction over patent appeals, independently developed their own versions of U.S. patent law.⁴⁴ As such, patentees had an incentive to adjudicate patent disputes in the friendlier Fifth, Sixth, and Seventh Circuits, while alleged infringers sought other more defendant friendly forums.⁴⁵ Further, the inconsistency was detrimental to the economy.⁴⁶ Proponents of change believed that having a single court for handling patent appeals was a viable solution to the consistency, uniformity, and economic problems plaguing the U.S. patent system.⁴⁷ Consequently, in 1982, Congress created the Federal Circuit under “a mandate to bring greater uniformity to patent law.”⁴⁸

In the early years of the court’s existence, the Federal Circuit single handedly reformed the patent system by interpreting patent law in such a way as to increase patent protection for patentees.⁴⁹ However, some commentators suggested this heightened patent protection diminished patent quality, allowed patent speculators to engage in excessive litigation, and negatively impacted the U.S. economy.⁵⁰ Congress attempted to address these concerns in 2001, but by 2006, nothing substantive had come to pass.⁵¹

43. See Eric E. Benson, *The Patent Reform Act of 2007*, LEXIS, Dec. 18, 2007.

44. Kyle J. Fiet, *Restoring the Promise of Markman: Interlocutory Patent Appeals Reevaluated Post-Phillips v. AWH Corp.*, 84 N.C. L. REV. 1291, 1297 (2006).

45. Benson, *supra* note 43.

46. *Id.*

47. *Id.*

48. Fiet, *supra* note 44, at 1298 (citing H.R. REP. NO. 97-312, at 20-23 (1981)).

49. See Benson, *supra* note 43 (“The Federal Circuit took on its charge with gusto . . . [creating] a significantly more favorable environment for patentees.”).

50. See *id.*

51. *Id.*

In 2006 and 2007, the Supreme Court took patent reform into its own hands and reversed the Federal Circuit on several significant patent issues.⁵² The Supreme Court's steps toward patent reform was one of the triggers of Congress's introduction of the Patent Reform Act of 2007, the first major reform of the U.S. patent system in more than fifty years.⁵³ Currently, there are two versions of the bill—one passed by the House of Representatives⁵⁴ and one that has stalled in the Senate.⁵⁵ Both bills are similar because they each address nearly the same issues pertinent to patent law in the United States.⁵⁶

2. *Catalysts for the Patent Reform Act of 2007*

Congress has voiced a number of concerns regarding the U.S. patent system, which have served as catalysts for the Patent Reform Act of 2007.⁵⁷ These concerns include issues relating to patent quality; patent litigation; harmonization of the U.S. patent system with patent systems abroad; patent speculators; and the specific needs of individual inventors, universities, small firms, entrepreneurs, and the like.⁵⁸

With respect to the patent quality issue, high quality patents facilitate patent enforcement and technology transfer and minimize uncertainties about infringements by clearly defining the scope of the patentee's claims.⁵⁹ On the other hand, poor quality patents promote opportunistic behavior⁶⁰ and

52. *See id.* (citing *Microsoft Corp. v. AT & T Corp.*, 127 S. Ct. 1746 (2007); *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118 (2007); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 946 (2006); *Illinois Tool Works Inc. v. Indep. Ink, Inc.*, 547 U.S. 28 (2006)).

53. *See Benson*, *supra* note 43.

54. Patent Reform Act of 2007, H.R. 1908, 110th Cong. (2007).

55. Patent Reform Act of 2007, S. 1145, 110th Cong. (2007).

56. *See Benson*, *supra* note 43.

57. *See id.*; THOMAS & SCHACHT, *supra* note 7, at 6 (discussing the issues which motivated the patent reform legislation).

58. *See THOMAS & SCHACHT*, *supra* note 7, at 6.

59. *See id.*

60. Poor quality patents create an incentive for speculators to acquire and enforce patents in order to recover substantial damages awards in infringement actions. *Id.* at 7; *see also infra* notes 71–75 and accompanying text.

adversely affect patentees.⁶¹ As such, it is in the best interest of the patent system to ensure that patents are at the highest level of quality as possible.

Currently, patent litigation in the United States is quite expensive and overly complex.⁶² For example, a 2007 survey revealed that the mean cost of patent litigation with more than \$25 million at stake was more than \$5 million.⁶³ In effect, the inherent complexity of patent litigation is one of the reasons why it is so expensive.⁶⁴ Further, the high cost and complexity associated with patent litigation is disadvantageous because it creates a disincentive for patent holders to exercise their right to exclude and bring meritorious infringement claims.⁶⁵

In addition, concerns exist over the lack of harmonization between the U.S. patent system and patent systems abroad.⁶⁶ In an increasingly global economy, an inventor or assignee may want to file patent applications in several different countries in order to secure the most effective patent protection.⁶⁷ Unfortunately, because there is no universal global patent grant available, seeking patent protection abroad can prove to be very complex, expensive, and time consuming.⁶⁸ Despite recent global harmonization efforts, inconsistencies remain between the U.S. patent system and those of leading countries abroad.⁶⁹

61. A patentee who invests money up front on a poor quality patent will receive no return on his investment if the patent is later determined to be invalid. THOMAS & SCHACHT, *supra* note 7, at 7.

62. *Id.* at 8.

63. Christopher A. Harkins, *A Budding Theory of Willful Patent Infringement: Orange Books, Colored Pills, and Greener Verdicts*, 2007 DUKE L. & TECH. REV. 6, n.11 (citing AM. INTELLECTUAL PROP. LAW ASS'N, 2007 REPORT OF THE ECONOMIC SURVEY 25–26 (2007)).

64. Patent litigation is complex because of “legal and technological issues, extensive discovery proceedings, expert witnesses, and specially qualified attorneys.” THOMAS & SCHACHT, *supra* note 7, at 8.

65. *See id.*

66. *See, e.g., id.* at 8–9.

67. *Id.*

68. *Id.* at 8.

69. *Id.* at 9.

Another issue concerns “patent speculators”⁷⁰ or “patent trolls,”⁷¹ as they are sometimes called. Many believe patent speculators chill innovation by acquiring patents for the sole purpose of enforcing them.⁷² As a general matter, these patent speculators have no intention of practicing or further developing the patented inventions they accumulate—their sole purpose is to make substantial amounts of money in patent infringement proceedings.⁷³ Some have argued that patent speculators may also create problems by securing “submarine patents,” which either take too long to issue or are overly broad enough to create industrywide disruption and uncertainty.⁷⁴ Further, when speculators sue for infringement, they are usually not amenable to infringement counterclaims asserted by the defendant because they neither participate in the marketplace nor develop products of their own.⁷⁵ Many perceive this imbalance to be unfortunate because it gives patent speculators an unfair advantage in patent litigation cases.⁷⁶

A final issue of congressional concern involves the specific needs of smaller business entities with respect to the patent system.⁷⁷ In particular, individual inventors, universities, small firms, and entrepreneurs are often heavily dependent upon the

70. A patent speculator prefers the acquisition and enforcement of patents to engaging in productive activities such as research, development, and manufacturing. *Id.*

71. Patent trolls are patent licensing companies that patent inventions without any intention of producing them, but instead allege patent infringement and threaten litigation against similar marketplace producers in order to receive revenues. Aaron B. Rabinowitz, *Keep Your Eye on Your Ball: Patent Holders' Evolving Duty to Patrol the Marketplace for Infringement*, 5 NW. J. TECH. & INTELL. PROP. 192, 193–94 (2007).

72. See generally David G. Barker, *Troll or No Troll? Policing Patent Usage With an Open Post-Grant Review*, 2005 DUKE L. & TECH. REV. 9 (2005) (arguing open post-grant review is necessary whenever patents are renewed or sold to prevent patent trolls from stifling innovation).

73. Elizabeth D. Ferrill, *Patent Investment Trusts: Let's Build a PIT to Catch the Patent Trolls*, 6 N.C. J. L. & TECH. 367, 367 (2005) (quoting Peter Detkin, who originally coined the term patent troll).

74. THOMAS & SCHACHT, *supra* note 7, at 9 (quoting Michael Ravnitsky, *More Lemelson Suits*, NAT'L L. J., Dec. 17, 2001, at B9).

75. See *id.* at 10.

76. See, e.g., *id.*

77. *Id.* at 6.

patent system—much more so than larger business entities.⁷⁸ This is because larger business entities likely have adequate substitutes to the patent system at their disposal that smaller entities do not have access to, including “trade secrecy, ready access to markets, trademark rights, speed of development, and consumer goodwill.”⁷⁹

As a result, all of these congressional issues are addressed at least to some extent in the Patent Reform Act of 2007.⁸⁰

3. *Likely Impact of the Patent Reform Act of 2007 on Different Industries*

Various industries will likely react to the patent reform bill in different ways.⁸¹ For example, pharmaceutical companies and software companies have different views on patent reform and the patent system in general.⁸² Specifically, pharmaceutical companies favor strong patent rights because they spend a substantial amount of time and money conducting clinical trials and research.⁸³ Even though they invest a substantial amount up front in order to develop a particular drug, it is relatively easy to reproduce that drug once it has been formulated.⁸⁴ It is because of this ease of drug reproduction that pharmaceutical companies favor strong patent rights⁸⁵ and, therefore, oppose patent reform that seemingly weakens patents.

On the other hand, software companies favor weak patents because the inherent nature of software development is cumulative, involving several different patented technologies and several different patent holders.⁸⁶ According to software

78. *Id.* at 10–11.

79. *Id.* at 11.

80. *See generally* Patent Reform Act of 2007, H.R. 1908, 110th Cong. (2007).

81. *See, e.g.*, WENDY H. SCHACHT, CONG. RESEARCH SERV., PATENT REFORM: ISSUES IN THE BIOMEDICAL AND SOFTWARE INDUSTRIES 1 (2006).

82. *Id.* at 1–2.

83. *See id.* at 5–6.

84. *Id.* While it may cost up to \$800 million to develop a particular drug and obtain FDA approval, it costs at most \$2 million to bring a generic version of a particular drug to market. *Id.* at 7.

85. *See id.* at 12 (noting the importance of patent protection to the pharmaceutical industry).

86. *See id.* at 9–10.

companies, a strong patent system is disadvantageous because it is not flexible enough to accommodate software and computer technologies.⁸⁷ Software companies argue the result of this mismatch has been uncertainty and continuous patent litigation.⁸⁸

Because these industries have competing views, the ultimate resolution of their differing desires on patent reform is unclear.⁸⁹ Inevitably, the tension between these industries will persist regardless of whether the patent reform bill is enacted into law.⁹⁰

C. A Global Perspective

Even though no universal global patent grant exists,⁹¹ patent systems abroad are nevertheless linked by international agreements and treaties that “comprise the international intellectual property regime.”⁹² Fortunately, this international regime has facilitated efforts to seek patent protection in foreign countries.⁹³

One such international agreement is the 1883 Paris Convention for the Protection of Industrial Property (Paris Convention).⁹⁴ The Paris Convention obligates member countries, including the United States, to provide “national treatment” to their fellow members.⁹⁵ One of the advantages of

87. *Id.* at 10. Software companies argue a strong patent system inadequately matches patents with respective innovations. *Id.*

88. *See, e.g.*, Symposium, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, Executive Summary*, 19 BERKELEY TECH. L.J. 861, 868 (2004) (suggesting that uncertainty and threatened litigation may result from matching a software patent claiming a single routine with an entire software program).

89. SCHACHT, *supra* note 81, at 13.

90. *See, e.g., id.*

91. *See supra* note 68 and accompanying text.

92. SCHECHTER & THOMAS, *supra* note 4, at 8.

93. *Id.* at 9.

94. *Id.* at 19; Paris Convention for the Protection of Industrial Property, Mar. 20, 1883, 13 U.S.T. 1 [hereinafter Paris Convention].

95. SCHECHTER & THOMAS, *supra* note 4, at 19 (citing Paris Convention, *supra* note 94, art. 2). National treatment involves member countries affording other members of the Paris Convention the same patent law benefits and protection as it provides to domiciliaries of its own country. *See id.* at 19.

being a member of the Paris Convention is that a patentee can secure a priority date by filing a patent application in any member country.⁹⁶ If the patentee then decides to file in another member country, he can enjoy the benefit of the earlier filing date as long as he files subsequent applications within twelve months of the first application's file date.⁹⁷ This twelve month grace period is advantageous because it prevents later inventors from securing patent rights in their own countries before the rightful patentee has an opportunity to seek foreign patent protection.⁹⁸ In spite of this grace period, however, U.S. inventors must still comply with the U.S. time bar limitation.⁹⁹

In addition, the Patent Cooperation Treaty (PCT) contributes to the international intellectual property regime.¹⁰⁰ Formed in 1970, the PCT greatly streamlined and simplified the process for securing patent protection in multiple countries.¹⁰¹ For example, by filing a single PCT international application, a patentee can secure patent protection in any member country or countries that he designates.¹⁰² Because the United States is a signatory of the PCT, by filing an international application and designating the United States, a foreign patentee can secure a U.S. patent filing date (even against U.S. time bars) without ever setting foot in the United States.¹⁰³ Designated member countries have agreed to treat a patentee's international application filing date as the actual filing date secured in their respective countries.¹⁰⁴ However, the PCT does not require member countries to adopt international application requirements outlined in the treaty.¹⁰⁵ Indeed, filing an

96. See Paris Convention, *supra* note 94, art. 4.

97. See *id.*

98. SCHECHTER & THOMAS, *supra* note 4, at 19.

99. 35 U.S.C. § 119(a) (2000 & Supp. V 2005). See *supra* text accompanying notes 19–23.

100. Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231.

101. SCHECHTER & THOMAS, *supra* note 4, at 19.

102. See Patent Cooperation Treaty, *supra* note 100, arts. 3–4.

103. See *id.* arts. 3–4, 11; see also SCHECHTER & THOMAS, *supra* note 4, at 19.

104. Patent Cooperation Treaty, *supra* note 100, art. 11.

105. *Id.* art. 27.

international application under the PCT is an efficient and viable beginning option for a patentee seeking multinational patent protection.¹⁰⁶

A third contributor to the international intellectual property regime is the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement).¹⁰⁷ The TRIPS Agreement is notable because it is the first agreement to require member countries to adopt and maintain standardized substantive patent law¹⁰⁸ in order to promote international trade.¹⁰⁹ The TRIPS Agreement includes a national treatment provision that resembles that found in the Paris Convention.¹¹⁰ The United States, a member country of the TRIPS Agreement, passed the Uruguay Round Agreements Act (URAA) during the Clinton Administration in an attempt to comply with TRIPS Agreement standards.¹¹¹ In particular, the URAA introduced provisional patent applications into the U.S. patent system, extended the patent term to twenty years minus the time spent prosecuting the application, and designated proof of invention in member countries as being acceptable evidence for securing

106. See SCHECHTER & THOMAS, *supra* note 4, at 19.

107. Agreement on Trade-Related Aspects of Intellectual Property Rights, Apr. 15, 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 1C, 1869 U.N.T.S. 299, 33 I.L.M. 1197 (1994) [hereinafter TRIPS Agreement]; see SCHECHTER & THOMAS, *supra* note 4, at 8–9.

108. SCHECHTER & THOMAS, *supra* note 4, at 20. For example, the TRIPS Agreement requires member countries to adopt patentability standards such as novelty, usefulness, and nonobviousness into their patent systems. TRIPS Agreement, *supra* note 107, art. 27. In addition, the TRIPS Agreement requires an issued patent to confer a right on the patentee to exclude others from “making, using, offering for sale, selling, or importing” the patented invention. *Id.* art. 28. Further, the agreement requires that the patent application contain enabling language that will allow one skilled in the art to carry out the invention and indicates that a patent applicant may be required to disclose what he knows to be the best mode for carrying out the invention. *Id.* art. 29. Another key requirement member countries must incorporate into their patent systems is the patent term of twenty years running from the filing date. *Id.* art. 33.

109. See SCHECHTER & THOMAS, *supra* note 4, at 19–20 (citing TRIPS Agreement, *supra* note 107, pmb1).

110. TRIPS Agreement, *supra* note 107, art. 3. See also *supra* note 95 and accompanying text (discussing meaning of national treatment).

111. Uruguay Round Agreements Act, Pub. L. No. 103–465, 108 Stat. 4809 (1994); see SCHECHTER & THOMAS, *supra* note 4, at 20.

patent rights in the United States.¹¹² By making these amendments, the United States has shown at least some commitment to strive toward, and be a key player in, global patent law harmonization.¹¹³

III. STATUTORY COMPARISON AND FITTING INTO THE GLOBAL PATENT LAW HARMONIZATION SPECTRUM

Harmonization with patent systems abroad is an ideal characteristic of any domestic patent system.¹¹⁴ Indeed, global patent law harmonization will reduce global patent protection costs, make the USPTO and foreign patent offices more efficient, and improve the quality of patent rights.¹¹⁵ Further, harmonization may allow the United States to enter into a symbiotic patent relationship with foreign patent systems.¹¹⁶ In this regard, global patent law harmonization may facilitate the acquisition of foreign patent rights for American patent applicants, while simultaneously facilitating the acquisition of American patent rights for foreign patent applicants.¹¹⁷ If global patent players can cooperate in this way, inventors will have an incentive to continue innovation on a global scale, which is an objective of international patent law.¹¹⁸ Indeed, these benefits may be a natural consequence if the United States adopts patent reform legislation that seeks to promote global patent law harmonization.¹¹⁹

112. SCHECHTER & THOMAS, *supra* note 4, at 20.

113. *See id.* at 19; Anneliese M. Seifert, *Will the United States Take the Plunge Into Global Patent Law Harmonization? A Discussion of the United States' Past, Present, and Future Harmonization Efforts*, 6 MARQ. INTELL. PROP. L. REV. 173, 184 (2002).

114. *See* Seifert, *supra* note 113, at 197.

115. *See* World Intellectual Property Organization [WIPO], *Standing Committee on the Law of Patents*, at 4, SCP/10/11, (June 14, 2004). *See also* Seifert, *supra* note 113, at 200. Harmonization will make global patent offices more efficient by minimizing duplicative prior art searches, examinations, and patent grants amongst international offices. *See id.*

116. *See* Seifert, *supra* note 113, at 200.

117. Susanna Chenette, Note, *Maintaining the Constitutionality of the Patent System*, 35 HASTINGS CONST. L.Q. 221, 252 (2008).

118. *See* Victoria E. Luxardo, Comment, *Towards a Solution to the Problem of Illegitimate Patent Enforcement Practices in the United States: An Equitable Affirmative Defense of "Fair Use" in Patent*, 20 EMORY INT'L L. REV. 791, 830 (2006).

119. *See id.*

The Patent Reform Act of 2007 contains key provisions that fall on different places along the global patent law harmonization spectrum. The provisions either promote, hinder, or have little to no effect on harmonization of global patent systems abroad.¹²⁰ Specifically, the first-inventor-to-file priority rule, prior user rights, elimination of section 102(d) of the Patent Act, assignee filing, and publication of pending applications are key provisions of the Patent Reform Act of 2007 that will promote harmonization of the global patent system.¹²¹

Conversely, the grace period, post-grant review procedures, and the best mode requirement are key provisions that will hinder harmonization of the global patent system.¹²² As a result, changes need to be made regarding these provisions in order to better solidify the United States' commitment to global patent law harmonization.

Lastly, elimination of sections 102(c) and 102(f) of the Patent Act, reasonable royalty and willful infringement damages, patent venue, interlocutory claim construction appeals, and inequitable conduct are key provisions of the Patent Reform Act of 2007 that will have little to no effect on harmonization of the global patent system.¹²³ Arguably, it is immaterial that these proposed amendments will have little to no effect on patent harmonization abroad because they were formulated with different congressional concerns in mind.

A. Patent Reform Act Amendments that Promote Global Patent Law Harmonization

1. First-Inventor-to-File Priority Rule

An adequate patent system must be capable of resolving the issue of who gets a patent when two or more inventors independently develop the same invention at approximately the

120. *See infra* Parts III.A, III.B, III.C.

121. *See infra* Part III.A.

122. *See infra* Part III.B.

123. *See infra* Part III.C.

same time.¹²⁴ Under current U.S. law, the “first inventor in fact”¹²⁵ is awarded the patent if he did not abandon, suppress, or conceal his invention.¹²⁶ A key disadvantage of this first-to-invent priority rule is that it is inconsistent with patent systems abroad.¹²⁷ Indeed, amongst all nations with patent systems, the United States is the only nation that has a first-to-invent priority rule; other systems are based on a first-inventor-to-file priority rule.¹²⁸

Under the proposed legislation embodied in the Patent Reform Act of 2007, the United States will adopt a first-inventor-to-file priority rule.¹²⁹ According to this rule, the inventor who is first to file a patent application with the USPTO is entitled to a patent, even if he was not the first inventor in fact.¹³⁰ A clear advantage of this priority rule is that it will promote harmonization abroad because the rule is aligned with the priority rules of other international patent systems.¹³¹

If the U.S. patent system is compatible with international patent systems in this way, the United States will be able to easily join in international treaties as it sees fit and better compete with its leading international trading partners.¹³² Further, this priority rule will enhance legal certainty within the U.S. patent system by providing a bright line standard that is easier to verify than the first-to-invent priority rule—essentially all that is required to determine the priority right (assuming the same claimed scope or claimed invention) is a comparison of the relevant filing dates.¹³³ Also, the priority rule is consistent with current business protocol because informed

124. See THOMAS & SCHACHT, *supra* note 7, at 14.

125. The first inventor in fact is the first to have invented and is given priority when more than one patent application covering the same invention is filed. *Id.*

126. 35 U.S.C. § 102(g)(2) (2000).

127. See THOMAS & SCHACHT, *supra* note 7, at 14.

128. *Id.*

129. Patent Reform Act of 2007, H.R. 1908, 110th Cong. § 3 (2007).

130. See THOMAS & SCHACHT, *supra* note 7, at 14.

131. See *id.* at 9.

132. See Karen E. Simon, Comment, *The Patent Reform Act's Proposed First-To-File Standard: Needed Reform or Constitutional Blunder?*, 6 J. MARSHALL REV. INTELL. PROP. L. 129, 145 (2006).

133. See THOMAS & SCHACHT, *supra* note 7, at 15.

U.S. business entities already organize according to a first-inventor-to-file standard in order to secure foreign patent rights.¹³⁴ Another advantage of the priority rule is that it will decrease litigation costs by eliminating the need for interference proceedings, which are used to resolve priority right disputes amongst inventors.¹³⁵

In spite of these advantages, however, shifting to this new priority rule may have some negative effects.¹³⁶ For example, arguably, the first-inventor-to-file rule is unfair because it will create incentives to race to file with the USPTO.¹³⁷ As such, patent quality may be compromised because applications will be hastily filed.¹³⁸ Also, some critics argue that the priority standard is unconstitutional because the language of Article I, Section 8, Clause 8 of the U.S. Constitution requires a first-to-invent priority rule.¹³⁹ However, this argument has little merit because it is well-established (and constitutional) that a second inventor in fact can secure the priority right in the event that the first inventor in fact “abandoned, suppressed, or concealed” the invention.¹⁴⁰

134. *Id.*

135. *Id.*

136. *See, e.g., id.*

137. *See id.*

138. *Id.*

139. *See, e.g., id.* at 16. Implementing a first-inventor-to-file priority rule will change the meaning of “Inventors” in the constitutional provision to those who file a patent application first, even if they were not first to independently develop the invention. *See* Simon, *supra* note 132, at 143.

140. *See* THOMAS & SCHACHT, *supra* note 7, at 16; *see also* 35 U.S.C. § 102(g)(2) (2000).

However, the advantages of the first-inventor-to-file priority rule outweigh the disadvantages. In this regard, this new rule will promote global harmonization of patent systems abroad better than the current first-to-invent priority rule.¹⁴¹ This is evidenced by the fact that Europe and Japan have similar provisions in their patent systems.¹⁴²

2. *Prior User Rights*

Prior user rights issues arise when a subsequent inventor is granted a patent before the first inventor files a patent application.¹⁴³ Under the existing law, the first inventor of a “method of doing or conducting business” has a defense to infringement if that method is later patented by another independent inventor.¹⁴⁴ Currently, this is the only prior user right granted by the U.S. patent system.¹⁴⁵ Indeed, prior user rights issues are currently a rare occurrence in the United States because it is understood that a first inventor working in the United States invalidates the rights of any subsequent inventor under the first-to-invent priority rule.¹⁴⁶ However, if the United States adopts a first-inventor-to-file priority rule as proposed in the Patent Reform Act of 2007, then prior user rights issues will be a natural consequence.¹⁴⁷

The Patent Reform Act of 2007 will expand the current statute by allowing prior user rights to apply to all patented subject matter, not just “method[s] of doing or conducting

141. Letter from Michael K. Kirk, Executive Dir. of Am. Intellectual Prop. Law Ass'n., to Honorable Jon. W. Dudas, Under Sec'y of Commerce for Intellectual Prop. and Director USPTO (June 22, 2007), http://www.aipla.org/Content/ContentGroups/Issues_and_Advocacy/Comments2/Patent_and_Trademark_Office/20075/USPTO-on-Harmonization.pdf.

142. MINDY L. KOTLER & GARY W. HAMILTON, U.S. DEPT OF COMMERCE, A GUIDE TO JAPAN'S PATENT SYSTEM 26 (1995), <http://www.ta.doc.gov/Reports/JapanPatent/pages.pdf>.

143. Ryan M. Corbett, Note, *Harmonization of U.S. and Foreign Patent Law and H.R. 2795: The Patent Reform Act of 2005*, 18 FLA. J. INT'L L. 717, 721 (2006).

144. 35 U.S.C. § 273(a)(3), (b)(1).

145. Corbett, *supra* note 143, at 721.

146. See 35 U.S.C. § 102(g)(2); see also Corbett, *supra* note 143, at 721.

147. See *supra* text accompanying note 143.

business.”¹⁴⁸ Unfortunately, an individual’s awareness of prior user rights may create a disincentive to file patent applications, which will undermine policy goals of the patent system.¹⁴⁹ Further, some argue prior user rights cannot be reconciled with the Constitution because, by their very nature, they fail to grant exclusive rights to the patentee.¹⁵⁰ But, these critics fail to recognize that the current system limits the priority right to the first inventor working in the United States who did not abandon, suppress, or conceal his invention.¹⁵¹

In spite of real or misperceived drawbacks, the prior user rights provision will benefit individual inventors, universities, small firms, and entrepreneurs who may otherwise be unable to secure adequate patent protection.¹⁵² More importantly, the provision is consistent with the Patent Reform Act’s proposed first-inventor-to-file priority rule.¹⁵³ As such, the provision is advantageous for many of the same reasons as the first-inventor-to-file priority rule, including harmonization of the global patent system.¹⁵⁴ For example, Germany and Japan have patent systems that implement prior user rights.¹⁵⁵

3. *Elimination of 35 U.S.C. § 102(d)*

Under Section 102(d) of the Patent Act, an inventor is not entitled to a patent if he files a foreign patent application more than a year before filing a U.S. application and if the foreign patent issue date is prior to the U.S. filing date.¹⁵⁶ Even though this provision creates an incentive to secure U.S. patent rights,¹⁵⁷ its underlying policy goal is undermined because U.S.

148. THOMAS & SCHACHT, *supra* note 7, at 26 (quoting 35 U.S.C. § 273).

149. *See id.* at 27.

150. *See id.* “The Congress shall have Power . . . [t]o promote the Progress of . . . useful Arts, by securing for limited Times to . . . Inventors the *exclusive Right* to their . . . Discoveries . . .” U.S. CONST. art. I, § 8, cl. 8 (emphasis added).

151. 35 U.S.C. § 102(g)(2).

152. *See* THOMAS & SCHACHT, *supra* note 7, at 12, 26.

153. Corbett, *supra* note 143, at 721.

154. *See supra* notes 129–31 and accompanying text.

155. THOMAS & SCHACHT, *supra* note 7, at 27.

156. 35 U.S.C. § 102(d).

157. *See* THOMAS & SCHACHT, *supra* note 7, at 19.

inventors may *only* seek to secure U.S. patent rights.¹⁵⁸ Another drawback of this provision is that it is contrary to U.S. treaty obligations, which generally require national treatment¹⁵⁹ of patent matters.¹⁶⁰

The Patent Reform Act of 2007 will eliminate Section 102(d) of the Patent Act.¹⁶¹ This elimination will promote harmonization of the global patent system because it is more aligned with U.S. international treaty obligations.¹⁶² Indeed, the elimination will better solidify the U.S.'s role in the international intellectual property regime.

4. Assignee Filing

Under current U.S. patent law, the actual inventor must sign an oath¹⁶³ as part of a patent application even if he simultaneously assigns his patent rights to someone else, unless the inventor refuses to file or cannot be located.¹⁶⁴ The Patent Reform Act of 2007 will allow assignees to file patent applications with a substitute statement¹⁶⁵ instead of a signed inventor's oath.¹⁶⁶ Accordingly, this provision will help simplify and expedite the patent application filing process.¹⁶⁷ Furthermore, the proposed legislation better complies with international standards because patent systems abroad allow assignees to file patent applications in their names.¹⁶⁸ Also, this

158. *See id.*

159. *See supra* note 95 and accompanying text.

160. *See* THOMAS & SCHACHT, *supra* note 7, at 19.

161. *Id.* at 18.

162. *See id.* at 19.

163. 35 U.S.C. § 115 (2000). The oath must state that the inventor "believes himself to be the original and first inventor" of the invention claimed in the application. *Id.*

164. *See* 35 U.S.C. § 118 (Supp. V 2005).

165. H.R. 1908 sec. 4, § 115(d). A substitute statement is allowed if the inventor (1) "is unable to file the oath," or (2) "is under an obligation to assign and has refused to make the oath." *Id.*

166. *Id.*

167. THOMAS & SCHACHT, *supra* note 7, at 20–21 (citing PRESIDENT'S COMM'N ON THE PATENT SYS., TO PROMOTE THE PROGRESS OF USEFUL ARTS IN AN AGE OF EXPLODING TECHNOLOGY (1966)).

168. *See id.* at 9, 21.

provision is consistent with the adoption of the first-inventor-to-file priority rule because it will allow businesses to file patent applications faster.¹⁶⁹ A negative effect of this provision, however, is that patent applications filed by an assignee may lack a guarantee from the inventor that the application was prepared properly,¹⁷⁰ which would, in effect, diminish the quality of patent applications overall.¹⁷¹

In weighing the arguments, the proposed legislation of the Patent Reform Act of 2007 with respect to assignee filing will better promote harmonization of the global patent law system than the current statute. Indeed, the assignee filing legislation will promote harmonization because it is consistent with patent systems abroad and it will facilitate the United States' transition to the first-inventor-to-file priority rule.

5. *Publication of Pending Applications*

Currently, as a result of the American Inventors Protection Act of 1999, U.S. patent applications are published eighteen months after they are filed unless the patentee represents that he does not intend to file his application in foreign countries.¹⁷² Indeed, if the patentee does not seek patent protection abroad, the pending patent application will not be published in the United States.¹⁷³

The Patent Reform Act of 2007 will require the publication of all patent applications eighteen months after filing regardless of whether the patentee seeks foreign patent protection.¹⁷⁴ Arguably, the proposed legislation will deprive the patentee of the ability to maintain the secrecy of his pending patent

169. *Id.* at 21.

170. *Id.*

171. *See supra* notes 59–61 and accompanying text.

172. THOMAS & SCHACHT, *supra* note 7, at 30; American Inventors Protection Act of 1999, Pub. L. No. 106–113, § 4712, 113 Stat. 1501 (codified as amended in scattered sections of 35 U.S.C.).

173. THOMAS & SCHACHT, *supra* note 7, at 30.

174. Stephen T. Schreiner & Karen Axt, *Why Banks Are Now Implementing Patent Programs and How Patent Legislative Reforms Will Affect Banks*, 124 BANKING L.J. 724, 742 (2007).

application under certain circumstances.¹⁷⁵ The benefits of disclosure, however, far outweigh this minor setback.¹⁷⁶ For example, disclosure of pending patent applications will promote efficiency and save time and money.¹⁷⁷ In addition, disclosure will enable inventors to develop inventions that improve upon existing technologies and patentees to perform more accurate prior art searches.¹⁷⁸ Most importantly, disclosure after eighteen months will promote harmonization of patents systems abroad.¹⁷⁹ This is because most foreign patent systems publish all pending patent applications about eighteen months after the file date.¹⁸⁰

B. Patent Reform Act Amendments that Hinder Global Patent Law Harmonization

1. Grace Period

The Patent Reform Act of 2007 retains the grace period provision of the current statute,¹⁸¹ which provides that certain prior art events are capable of triggering the one year clock for timely filing a patent application.¹⁸² Clearly, the grace period pardons U.S. inventors by not immediately foreclosing patent rights upon a publicly accessible prior art event.¹⁸³ In fact, the grace period provision was initially adopted with university researchers in mind because they are pressured by their university employers to publish their research before seeking patent protection.¹⁸⁴

175. See THOMAS & SCHACHT, *supra* note 7, at 29–30.

176. Corbett, *supra* note 143, at 733.

177. *Id.* Under the Patent Act, an inventor risks wasting valuable resources if he fully develops an invention yet secures no patent rights because of an issued patent that was never disclosed when it was pending. See *id.*

178. See *id.*

179. *Id.* at 734.

180. THOMAS & SCHACHT, *supra* note 7, at 29–30.

181. See *id.* at 17.

182. See *supra* notes 21–26 and accompanying text.

183. See THOMAS & SCHACHT, *supra* note 7, at 17 (explaining how the one year grace period benefits inventors who wish to apply for patent protection).

184. Benson, *supra* note 43.

However, retention of this grace period provision will make the transition from the first-to-invent priority rule to the first-inventor-to-file priority rule difficult because, in some instances, the date of the invention will still remain a relevant and viable issue.¹⁸⁵ Moreover, retaining the grace period provision may not promote harmonization of the global patent system because most patent systems abroad do not provide for a grace period.¹⁸⁶ Generally, in other countries, a patent application may have to be filed before any public prior art triggering event or the inventor will lose the right to a patent.¹⁸⁷

Fortunately, the United States has considered these issues and plans to delay the effective date of the first-inventor-to-file priority provision until key trading partners, including Japan and Europe, incorporate substantially similar grace period provisions into their patent systems.¹⁸⁸ Indeed, global patent law harmonization will be promoted if either the United States abolishes its grace period provision or if countries abroad adopt a grace period provision into their patent systems.¹⁸⁹ But, it would be more advantageous for the United States if the latter occurred because it may increase the United States' bargaining power in global harmonization negotiations.¹⁹⁰

185. See THOMAS & SCHACHT, *supra* note 7, at 17. The invention date will be a relevant issue if a prior art reference first publishes during the grace period. See, e.g., *id.* In that case, the inventor will need to show that his invention date occurred before the date of the prior art reference. See *id.*

186. *Id.* at 18.

187. See Corbett, *supra* note 143, at 720. In Japan and Europe, grace periods are six months long, and they apply in more limited circumstances than in the United States. KOTLER & HAMILTON, *supra* note 142, at 29. For example, in Japan, disclosure by a third party is an absolute bar for obtaining a patent. *Id.* This is a much more limited practice than in the United States, where the patentee can secure a patent as long as he files within a year of the third party disclosure. See *supra* notes 21–26 and accompanying text. Europe takes an even more restrictive approach—because absolute novelty is required under the European patent regime—any disclosure is an absolute bar for obtaining a patent. Vincenzo Di Cataldo, *From the European Patent to a Community Patent*, 8 COLUM. J. EUR. L. 19, 24–25 (2002).

188. Benson, *supra* note 43, at 6–7.

189. See *id.*

190. See *id.* (noting that the USPTO opposes adopting a first-to-file provision absent reciprocal concessions by foreign patent offices).

2. *Post-Grant Review Procedures*

Currently, the Patent Act allows anyone to request a patent reexamination proceeding in order to resolve patent validity issues.¹⁹¹ The requester may cite only “prior art consisting of patents or printed publications” as grounds for invalidity.¹⁹² This limitation is one of the reasons why reexamination proceedings can provide a faster and less expensive alternative to litigation.¹⁹³

The reexamination proceeding may be either *ex parte* or *inter partes* in nature.¹⁹⁴ For an *ex parte* reexamination proceeding, anyone may request reexamination of a patent if he submits cited prior art in the form of patents or printed publications, a written statement explaining the relevance of the cited prior art to the disputed claims to be reexamined, and the required fee.¹⁹⁵ The identity of the real party in interest may remain confidential.¹⁹⁶ If the USPTO director determines the request raises a “substantial new question of patentability,” then *ex parte* reexamination of the patent will proceed in order to resolve the question.¹⁹⁷ The patentee may submit a statement regarding the patentability of the claims at issue for consideration in the reexamination.¹⁹⁸ As a practical matter, however, a patentee has a disincentive to submit such a statement if he wants to limit the role of a third party requester

191. 35 U.S.C. § 302 (Supp. V 2005); SCHECHTER & THOMAS, *supra* note 4, at 252.

192. 35 U.S.C. § 301 (2000).

193. *See* SCHECHTER & THOMAS, *supra* note 4, at 252.

194. *Id.*

195. *See* 35 U.S.C. §§ 301–302 (2000 & Supp. V 2005).

196. 35 U.S.C. § 301 (2000).

197. *See* 35 U.S.C. §§ 303–304 (Supp. V 2005).

198. *Id.* § 304.

in the proceeding.¹⁹⁹ Nevertheless, the USPTO director's determination of patentability is final and cannot be appealed.²⁰⁰

Inter partes reexamination proceedings are similar to ex parte reexamination proceedings, except a third party requester is allowed to be much more involved in the former.²⁰¹ For an *inter partes* reexamination proceeding, a third party²⁰² may request reexamination of a patent if he submits cited prior art in the form of patents or printed publications, a written statement explaining the relevance of the cited prior art to the disputed claims to be reexamined, and the required fee.²⁰³ The identity of the real party in interest must be disclosed in the written request.²⁰⁴ If the USPTO director determines the request raises a "substantial new question of patentability," then *inter partes* reexamination of the patent will proceed in order to resolve the question.²⁰⁵ The third party requester may submit written comments to responses filed by the patentee during the proceeding.²⁰⁶ Further, the third party requester (or the patentee) may appeal an adverse determination by the USPTO.²⁰⁷ These features of the *inter partes* reexamination proceeding show the characteristics of increased third party requester involvement. Lastly, a third party requester is estopped from raising patent validity issues he raised or could

199. SCHECHTER & THOMAS, *supra* note 4, at 253. A third party requester may participate in the proceeding by submitting a reply to the patentee's statement. 35 U.S.C. § 304. If the patentee does not submit a statement, however, the third party requester will have no involvement in the ex parte reexamination proceeding. *See id.* (providing a two month period during which a third party requester may file a reply for consideration during reexamination).

200. 35 U.S.C. § 303(c).

201. Dale L. Carlson & Robert A. Migliorini, *Patent Reform at the Crossroads: Experience in the Far East with Oppositions Suggests an Alternative Approach for the United States*, 7 N.C. J.L. & TECH. 261, 271 (2006).

202. Note this difference from an ex parte reexamination proceeding where anyone, including the patentee, may file the request. SCHECHTER & THOMAS, *supra* note 4, at 252 (citing 35 U.S.C. § 302).

203. 35 U.S.C. § 311.

204. *Id.* § 311(b)(1).

205. *Id.* §§ 312(a)–313.

206. *Id.* § 314(b)(2).

207. *Id.* § 315(a)–(b).

have raised during the reexamination proceeding.²⁰⁸ This estoppel effect creates a major disincentive for a third party requester to use this reexamination proceeding.²⁰⁹ But, patentees may also have a disincentive to use this reexamination proceeding because a court is free to apply an adverse reexamination result to an ongoing litigation proceeding.²¹⁰

The Patent Reform Act of 2007 will strike the “or could have raised” language²¹¹ of the Patent Act’s estoppel provision with respect to *inter partes* reexamination proceedings.²¹² Because third party requesters will only be estopped from making arguments that they actually made before the USPTO,²¹³ this amendment is intended to create more incentive for them to request *inter partes* reexamination proceedings.²¹⁴

In addition, the Patent Reform Act of 2007 will introduce post-grant review procedures.²¹⁵ For a post-grant review proceeding, a third party may request cancellation of a patent claim²¹⁶ if he submits a written request within twelve months of the patent issue or reissue date; supporting evidence including patents, printed publications, written sworn testimony of witnesses, or any other information required by the USPTO; and the appropriate fee.²¹⁷ The identity of the real party in interest must be disclosed in the written request.²¹⁸ The proceeding may also be initiated if the patentee provides written consent.²¹⁹

208. *Id.* § 315(c).

209. *See* THOMAS & SCHACHT, *supra* note 7, at 28.

210. *See, e.g.*, *EchoStar Techs. Corp. v. Tivo, Inc.*, No. 5:05 CV 81 DF, 2006 WL 2501494, at *2 (E.D. Tex. July 14, 2006) (explaining that a court may use a reexamination result to dismiss a pending suit or to otherwise reduce the complexity and length of a litigation proceeding).

211. Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 6(d) (2007).

212. *Id.*; 35 U.S.C. § 315(c) (Supp. V 2000).

213. *See* THOMAS & SCHACHT, *supra* note 7, at 28.

214. *See id.*

215. H.R. 1908 sec. 6(f)(1).

216. This third party cancellation request may be based on any ground of patent invalidity. *Id.* sec. 6, § 321.

217. *Id.* sec. 6, §§ 321–323.

218. *Id.* sec. 6, § 323(2).

219. *Id.* sec. 6, § 322(2).

The USPTO director will assign each post-grant review proceeding to a panel of three administrative patent judges.²²⁰ If the panel determines the request and accompanying evidence raise a “substantial question of patentability,” then post-grant review of the patent will proceed in order to resolve the question.²²¹ During the proceeding, the patentee may submit a response to the third party’s cancellation request.²²² Further, the patentee may file motions to cancel, propose a substitute for, or amend a challenged patent claim.²²³ The panel’s determination of patentability may be appealed by either the patentee or a third party.²²⁴ Lastly, during the opposition proceeding, a party is estopped from raising patent validity issues he raised or could have raised during a previous civil proceeding.²²⁵

Indeed, there is a significant overlap between post-grant review opposition proceedings and ex parte and *inter partes* reexamination proceedings.²²⁶ Accordingly, the USPTO director may determine how to handle additional proceedings that are pending during the post-grant review proceeding as he sees fit.²²⁷ Unfortunately, however, the overlap between post-grant review and reexamination proceedings will potentially create problems for the USPTO.²²⁸ For example, because the USPTO

220. *Id.* sec. 7, § 6.

221. H.R. 1908 sec. 6, § 325(a). “The Director shall assign each post-grant review proceeding to a panel of [three] administrative patent judges. Once assigned, each such panel of administrative patent judges shall have the responsibilities under chapter 32 in connection with post-grant review proceedings.” H.R. 1908 sec. 7, § 6(b)(5).

222. *Id.* sec. 6, § 327.

223. *Id.* sec. 6, § 329(a).

224. *See id.* sec. 6, § 336 (providing that any party to the post-grant proceeding has the right to appeal).

225. *Id.* sec. 6, § 334.

226. Carlson & Migliorini, *supra* note 201, at 308.

227. H.R. 1908 sec. 6, § 333. Specifically, the director may opt to stay, consolidate, or transfer the additional proceeding. *Id.*

228. *See* Carlson & Migliorini, *supra* note 201, at 308.

cannot anticipate which proceeding a third party will request,²²⁹ it may be unable to plan for adequate resources to meet such uncertain demands.²³⁰

Congress argues post-review opposition proceedings will enhance patent quality by filtering out invalid patents²³¹ and help to minimize the cost and complexity of patent litigation.²³² On the other hand, there are concerns that post-review opposition proceedings may be costly, complex, and unnecessarily burdensome for patentees.²³³ An even greater concern is that introducing post-review opposition proceedings into the U.S. patent system will be a step back with respect to the goal of global patent law harmonization.²³⁴

For example, Japan, a key trading partner of the United States,²³⁵ abolished post-grant review proceedings from its patent system in 2003.²³⁶ In its place, Japan established a trial for invalidity system.²³⁷ In the trial for invalidity system, anyone can request invalidation of a Japanese patent at any time.²³⁸ Further, the identity of the real party in interest may remain confidential unless incorrect inventorship is the grounds for invalidity.²³⁹

Ultimately, invalidity is determined by Japan's Board of Appeals and Trials.²⁴⁰ During the trial, the patentee may file a

229. Indeed, a third party may request either an *ex parte* or *inter partes* reexamination proceeding or a post-grant review proceeding as a means for challenging a patent claim. *Id.*

230. *Id.*

231. THOMAS & SCHACHT, *supra* note 7, at 7.

232. *Id.* at 8.

233. *Id.* at 29.

234. See Carlson & Migliorini, *supra* note 201, at 309 (observing the apparent inconsistency between the proposed opposition proceedings and efforts to harmonize international patent law).

235. U.S. Census Bureau, Top Ten Countries with Which the U.S. Trades: Month of July 2008, <http://www.census.gov/foreign-trade/top/dst/2008/07/balance.html> (last visited Nov. 1, 2008) (indicating that Japan is the U.S.'s fourth largest trading partner).

236. Carlson & Migliorini, *supra* note 201, at 309.

237. *Id.* at 285.

238. *Id.* at 286.

239. *Id.*

240. *Id.* at 287.

reply to a third party's invalidation request, which the third party may rebut by argument and additional evidence.²⁴¹ Evidence may consist of patents, printed publications, prior public knowledge or use, and oral testimony.²⁴² An adverse determination of invalidity by the Japanese Board may be appealed by either the third party or the patentee.²⁴³ On appeal, new evidence may be presented, but only with respect to a ground of invalidity previously raised.²⁴⁴ Lastly, a third party may later file another request with respect to the same patent as long as he raises a different ground of invalidity than that raised in the previous trial.²⁴⁵

In light of Japan's trial for invalidity system, there are at least three reasons why the United States' post-grant review proceeding will not promote harmonization of the global patent system. First, as previously mentioned, it is difficult to conceive that a post-grant review proceeding provision will promote global patent law harmonization when a key player like Japan has abolished its post-grant review proceeding²⁴⁶ in favor of a trial for invalidation system.²⁴⁷ Second, a post-grant review proceeding and an invalidation system like Japan's are much too different to be reconciled. For example, a key difference between the American and Japanese systems is that a patentee may not file a request for a post-grant review proceeding in the United States,²⁴⁸ while anyone may request a trial for invalidation in Japan.²⁴⁹ In addition, the United States imposes a twelve month window for filing the request,²⁵⁰ while Japan has no time restriction for its system.²⁵¹ Also, for the U.S. proceeding, the

241. *Id.* at 288.

242. *Id.*

243. *Id.*

244. *Id.*

245. *Id.* at 288–89.

246. *See id.* at 309 (observing the apparent inconsistency between the U.S.'s proposed opposition system and harmonization efforts in light of Japan's abolishing its opposition system).

247. *Id.* at 285.

248. H.R. 1908, 110th Cong. sec. 6, § 321 (2007).

249. *See supra* note 238 and accompanying text.

250. *See supra* note 217 and accompanying text.

251. *See supra* note 238 and accompanying text.

third party in interest must be disclosed,²⁵² while for the Japan system, the party in interest may remain confidential in most situations.²⁵³ Further, the U.S. post-grant review proceeding contains a restrictive estoppel provision that is absent from Japan's system.²⁵⁴ Third, China has a patent invalidity system²⁵⁵ that is very similar to Japan's²⁵⁶ and is consistent with the TRIPS Agreement,²⁵⁷ while the United States' post-grant review proceeding is neither similar to Japan's system nor consistent with the TRIPS Agreement.²⁵⁸ For these reasons, it is clear that U.S. adoption of post-grant review proceedings will compromise efforts to harmonize patent systems abroad.

Fortunately, the United States can take proactive steps to rectify the adverse effect that post-grant review proceedings may have on global patent law harmonization. For example, instead of incorporating post-grant review proceedings into the U.S. patent system, the United States should adopt a system that resembles Japan's trial for invalidity system,²⁵⁹ or at least eliminate some of the differences between the conflicting systems²⁶⁰ so that they can be more easily reconciled. In the alternative, the United States should adopt a system for

252. See *supra* note 218 and accompanying text.

253. See *supra* note 239 and accompanying text.

254. See *supra* notes 225, 245 and accompanying text.

255. Carlson & Migliorini, *supra* note 201, at 291. China's State Intellectual Property Office Patent Reexamination Board (Chinese Board) handles the patent invalidation proceedings. *Id.* at 290–91. In this system, anyone can request invalidation of a Chinese patent at any time, and the identity of the real party in interest may remain confidential. *Id.* at 291. Further, the requester may submit prior art evidence consisting of patents, printed publications, and public use or knowledge before the filing date in support of the grounds asserted for invalidity. *Id.* at 292. During the proceeding, the patentee may respond to the invalidation request by narrowing claims, to which the requester may rebut, submit additional prior art evidence, and raise additional grounds for invalidity. *Id.* The Chinese Board or the parties may request oral argument during the proceeding. *Id.* at 292–93. Finally, an adverse determination of invalidity by the Chinese Board may be appealed by either the patentee or the requester. *Id.* at 293.

256. *Id.* at 294.

257. See *id.* at 290 (stating that China's patent law "is considered to be in close compliance with TRIPS"); see also *supra* text accompanying notes 107–13.

258. See *supra* notes 246–57 and accompanying text.

259. See *supra* notes 235–45 and accompanying text.

260. See *supra* notes 248–54 and accompanying text.

reviewing issued patents that is consistent with the TRIPS Agreement, resembling China's patent invalidity system.²⁶¹ Indeed, any of these proposals will help put the United States back on track towards achieving global harmonization with respect to patent opposition proceedings.

3. *Best Mode Requirement*

Under the Patent Act, inventors must disclose in their patent application what they consider to be the best mode for carrying out the invention,²⁶² which is a subjective inquiry. A patentee's failure to disclose the best mode will render the affected claims invalid.²⁶³ Advocates of the best mode requirement argue that it promotes innovation by allowing the public to receive the most efficient implementation of the invention known by the inventor,²⁶⁴ levels the playing field between the public and the patentee when the patent expires,²⁶⁵ and prevents patentees from maintaining as a trade secret the previously perceived ideal method of carrying out their invention.²⁶⁶ Critics, on the other hand, argue the best mode requirement is superfluous because the enablement requirement adequately satisfies patent policy goals.²⁶⁷ Further, it is argued that the best mode requirement unnecessarily increases the cost and complexity of patent litigation proceedings because inquiring into the patentee's subjective beliefs is inherently

261. *See supra* note 255.

262. 35 U.S.C. § 112 (2000).

263. THOMAS & SCHACHT, *supra* note 7, at 35.

264. *Id.*

265. This aspect of the argument is slightly flawed because when a patent expires, there is no assurance that the public will be able to do anything that is disclosed in the patent or within its claims. This is because patent scopes frequently overlap and intersect. Paul M. Janicke, *Heat of Passion: What Really Happened in Graver Tank*, 24 AIPLA Q.J. 1, 48 n.160 (1996). For example, a dominant patent may have a patent term that extends later than a subservient patent such that when the subservient patent expires, the public is still excluded from the overlapping claim scopes present in the dominant patent. *Id.*

266. THOMAS & SCHACHT, *supra* note 7, at 35.

267. *Id.* According to the enablement requirement, a patent application must contain a written description providing language that will enable one skilled in the art to make and use the invention. *See supra* note 37.

speculative and may lead to discovery abuse.²⁶⁸ Lastly, critics argue that because technological knowledge acquired after the filing date need not be disclosed,²⁶⁹ it is likely that the best mode disclosed when the patent application is filed will no longer be the best mode once the patent expires.²⁷⁰

The Patent Reform Act of 2007 will virtually eliminate the best mode requirement from the U.S. patent system.²⁷¹ Arguably, the elimination will promote global patent law harmonization because most foreign countries do not have a comparable best mode provision in their patent systems.²⁷² However, the goal of global patent law harmonization will be realized more easily if the United States retains its best mode requirement and if other countries incorporate a similar requirement into their patent systems.²⁷³ Indeed, other countries should make the change and take a step toward global patent law harmonization—not the United States.

By maximizing its bargaining power, the United States can encourage foreign trading partners to adopt a best mode requirement²⁷⁴ into their patent systems. For example, the United States can agree to pursue specific reform efforts²⁷⁵ in

268. THOMAS & SCHACHT, *supra* note 7, at 35–36.

269. SCHECHTER & THOMAS, *supra* note 4, at 197.

270. THOMAS & SCHACHT, *supra* note 7, at 36.

271. Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 13 (2007). Under the Patent Reform Act of 2007, an inventor's failure to disclose the best mode for carrying out his invention may no longer be used as a ground for invalidation, which effectively eliminates the best mode requirement. *Id.*

272. Corbett, *supra* note 143, at 721–22.

273. By creating a platform for universal disclosure, the best mode requirement will promote global harmonization of patent systems abroad by facilitating the global exchange of technological information. *Id.* at 732. It should be a relatively easy transition for foreign patent systems to include a best mode requirement because many foreign inventors seek patent protection in the United States, and as such, they are already familiar with such a requirement. *Id.* Further, the best mode requirement will further the goals of any legitimate patent system, which include efficiency and the proliferation of innovation. *Id.* at 732–33. Indeed, the global patent community will benefit from the complete disclosure that the best mode requirement provides. *Id.*

274. See Seifert, *supra* note 113, at 183 (discussing recent instances of the United States changing its patent laws in exchange for other countries changing theirs).

275. In this regard, the United States' commitment to transition to a first-inventor-to-file priority rule may prove to be a very powerful bargaining chip. *Id.*

order to better align the U.S. patent system with foreign patent systems only if, in exchange, foreign trading partners agree to incorporate a best mode requirement into their patent systems.²⁷⁶ Indeed, exchanging promises of this type will promote global patent law harmonization.²⁷⁷ Additionally, foreign patent systems' inclusion of a best mode requirement will promote global patent law harmonization in another respect because the TRIPS Agreement requires member countries to adopt a best mode requirement.²⁷⁸

C. Patent Reform Act Amendments that Have Little to No Effect on Global Patent Law Harmonization

1. Elimination of 35 U.S.C. §§ 102(c) and (f)

Under Section 102(c) of the Patent Act, an inventor who has abandoned his invention is not entitled to a patent.²⁷⁹ As it stands, courts do not consider this to be a meaningful provision because few inventors relinquish their patent rights by allowing their invention to enter the public domain without compensation.²⁸⁰ Further, the doctrine of equitable estoppel²⁸¹ makes this provision unnecessary.²⁸²

In addition, under Section 102(f) of the Patent Act, a person is not entitled to a patent if "he did not himself invent the subject matter sought to be patented."²⁸³ This provision is redundant in light of 35 U.S.C. § 101, which suggests that only inventors are entitled to patent rights.²⁸⁴

276. See Seifert, *supra* note 113, at 183.

277. See *id.*

278. See TRIPS Agreement, *supra* note 107, art. 29.

279. 35 U.S.C. § 102(c) (2000).

280. THOMAS & SCHACHT, *supra* note 7, at 18.

281. Equitable estoppel is an affirmative defense in which the defendant must prove (1) the defendant reasonably inferred from the patentee's misleading conduct that the patentee would not enforce his patent rights against the defendant, (2) the defendant relied on the patentee's conduct, and (3) prejudice would result if the patentee is allowed to pursue his infringement action against the defendant. *Meyers v. Asics Corp.*, 974 F.2d 1304, 1308 (Fed. Cir. 1992).

282. THOMAS & SCHACHT, *supra* note 7, at 18.

283. 35 U.S.C. § 102(f).

284. THOMAS & SCHACHT, *supra* note 7, at 19.

The Patent Reform Act of 2007 will eliminate both of these statutory provisions.²⁸⁵ Even though eliminating Sections 102(c) and 102(f) will help to simplify and streamline the statute to a certain extent, the elimination is not likely to have any effect on patent harmonization abroad.²⁸⁶ This is because the elimination of these provisions aims to simplify the U.S. patent system, which will likely result in only a domestic impact.²⁸⁷

2. Damages

a. Reasonable Royalty

Currently, the damages used to compensate a patentee for infringement must be based on a “reasonable royalty.”²⁸⁸ Courts calculate the reasonable royalty by imposing a hypothetical licensing negotiation based on the facts of a particular case.²⁸⁹ As such, the reasonable royalty is set from the date the infringement began and at the amount a willing patentee and a willing licensee would have negotiated.²⁹⁰ Arguably, this methodology is inequitable because it overcompensates the patentee.²⁹¹

In response to this inequity, the Patent Reform Act of 2007 contains a damages provision that explains how courts should determine the reasonable royalty required to adequately compensate a patentee in the event of an infringement.²⁹² Specifically, the provision explains that it should be determined on an ad hoc basis whether the patentee is entitled to an apportionment of damages,²⁹³ or if the patentee is entitled

285. See Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 3, § 102 (2007).

286. See THOMAS & SCHACHT, *supra* note 7, at 18–19, 38.

287. See *id.* at 18–19; S. REP. NO. 110–259, at 5 (2008).

288. 35 U.S.C. § 284 (Supp. V 2005).

289. *Minco, Inc. v. Combustion Eng'g, Inc.*, 95 F.3d 1109, 1119 (Fed. Cir. 1996).

290. *Id.*

291. THOMAS & SCHACHT, *supra* note 7, at 22.

292. See Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 5(a) (2007).

293. *Id.* A patentee is entitled to a reasonable royalty based on the apportionment of damages when the court determines that the sales of the infringer's product or process is the result of many factors beyond the scope of the patentee's invention. THOMAS & SCHACHT, *supra* note 7, at 21. In this regard, the patentee can only recover the

instead to entire market value damages.²⁹⁴ Some critics believe that the current case law adequately provides for apportionment of damages such that the proposed legislation will unnecessarily diminish the rights of the patentee and deter innovation overall.²⁹⁵ Congress, however, believes that the reasonable royalty provision will help minimize patent speculator abuse.²⁹⁶

Japan, a leading U.S. trading partner,²⁹⁷ also allows patentees to recover reasonable royalty damages if their patent is infringed.²⁹⁸ Even so, the reasonable royalty provision of the Patent Reform Act of 2007 will have a marginal effect on harmonization of the global patent system at best. This is because the pending reasonable royalty legislation is targeted to address the congressional concern of patent speculator abuse without any international implications.²⁹⁹ While the effects of the reasonable royalty provision seem to be targeted toward the U.S. patent system, it is unclear whether the provision will incidentally create an incentive to infringe as it attempts to rectify overcompensation of patentees.³⁰⁰

b. Willful Infringement

The Patent Act allows courts to use their discretion to award enhanced damages to a patentee if his patented invention is infringed.³⁰¹ By case law mandate, courts can only award these enhanced damages in the event of willful infringement.³⁰² The

proportion of damages that his patented invention contributed to the infringer's sales. See *Dowagiac Mfg. Co. v. Minn. Moline Plow Co.*, 235 U.S. 641, 646 (1915) (discussing the use of a proportionate damages calculation).

294. See H.R. 1908 sec. 5(a). A patentee is entitled to a reasonable royalty based on entire market value damages when the court determines that the patented invention "is the basis for consumer demand." *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1580 (Fed. Cir. 1989).

295. THOMAS & SCHACHT, *supra* note 7, at 22.

296. See *id.* at 10.

297. See U.S. Census Bureau, *supra* note 235.

298. KOTLER & HAMILTON, *supra* note 142, at 35.

299. See THOMAS & SCHACHT, *supra* note 7, at 10.

300. *Id.* at 22.

301. "[T]he court may increase the damages up to three times the amount found or assessed." 35 U.S.C. § 284 (Supp. V 2005).

302. *In re Seagate Tech., L.L.C.*, 497 F.3d 1360, 1368 (Fed. Cir. 2007).

Patent Reform Act of 2007 explains what constitutes willful infringement.³⁰³ Specifically, it provides that a court may find willful infringement only when “(1) the infringer received specific written notice from the patentee and continued to infringe after a reasonable opportunity to investigate; (2) the infringer intentionally copied from the patentee with knowledge of the patent; or (3) the infringer continued to infringe after an adverse court ruling.”³⁰⁴ Further, the Patent Reform Act of 2007 limits the doctrine by providing that a court may not find willful infringement if the infringer had an “informed good faith belief” that the patent in question was invalid, unenforceable, or not infringed.³⁰⁵

Congressional supporters argue the proposed legislation will help to minimize the cost and complexity of patent litigation because the provision clearly delineates when and when not to find willful infringement.³⁰⁶ A disadvantage of this provision, however, is that it may encourage a form of “willful blindness”³⁰⁷ because innovators may have a disincentive to review issued patents until they are accused of infringement.³⁰⁸ In this regard, willful blindness will hinder the proliferation of knowledge that the patent system is designed to encourage in the first place.³⁰⁹ In addition, increased damages for willful infringement may create a disincentive for potential infringers to challenge patents of questionable validity,³¹⁰ which will inevitably increase the amount of poor quality patents.³¹¹

Similar to the reasonable royalty provision,³¹² the willful infringement provision is unlikely to promote harmonization of

303. Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 5(a) (2007).

304. THOMAS & SCHACHT, *supra* note 7, at 24.

305. H.R. 1908 sec. 5(a).

306. See THOMAS & SCHACHT, *supra* note 7, at 8.

307. An alleged infringer is willfully blind when his conduct recklessly disregards the possibility that he is infringing. See, e.g., *Island Software & Computer Serv., Inc. v. Microsoft Corp.*, 413 F.3d 257, 263 (2d Cir. 2005).

308. THOMAS & SCHACHT, *supra* note 7, at 24.

309. *Id.*

310. See *id.*

311. See *id.*; *supra* notes 59–61 and accompanying text.

312. See *supra* Part III.C.2.i.

the global patent system.³¹³ In fact, in Japan, enhanced damages are unavailable in the event of willful infringement.³¹⁴ Moreover, it is difficult to conceive that the state of mind of an infringer in the United States will have any impact on patent systems abroad. Indeed, the willful infringement provision addresses the congressional concern of costly and complex litigation by providing a standard that promotes certainty and ease of judicial administration with respect to the U.S. patent system without any international implications.³¹⁵

3. Patent Venue Requirements

Under the patent venue statute, venue is proper “in the judicial district where the defendant resides or where the defendant has committed acts of infringement and has a regular and established place of business.”³¹⁶ Further, a corporate defendant is “deemed to reside in any judicial district in which it is subject to personal jurisdiction at the time the action is commenced.”³¹⁷ This effectively makes a separate proper venue determination unnecessary for corporate defendants because venue will be proper where the defendant is subject to personal jurisdiction.³¹⁸ Plaintiffs suing for patent infringement thus have many opportunities to forum shop.³¹⁹ They currently prefer the Eastern District of Texas, which has now become the prime district for filing patent cases because of its ability to quickly resolve patent disputes.³²⁰

313. See THOMAS & SCHACHT, *supra* note 7, at 24–26 (discussing the need to “modif[y] U.S. patent law to conform with international standards” and presenting criticisms of the willful infringement provision).

314. KOTLER & HAMILTON, *supra* note 142, at 35.

315. See S. REP. NO. 110–259, at 5 (2008); THOMAS & SCHACHT, *supra* note 7, at 24.

316. 28 U.S.C. § 1400(b) (2000).

317. *Id.* § 1391(c).

318. See *VE Holding Corp. v. Johnson Gas Appliance Co.*, 917 F.2d 1574, 1583 (Fed. Cir. 1990) (holding that “venue in a patent infringement case includes any district where there would be personal jurisdiction over the corporate defendant at the time the action is commenced”).

319. THOMAS & SCHACHT, *supra* note 7, at 32–33.

320. Alisha Kay Taylor, Comment, *What Does Forum Shopping in the Eastern District of Texas Mean for Patent Reform?*, 6 J. MARSHALL REV. INTELL. PROP. L. 570, 570 (2007).

The Patent Reform Act of 2007 will alter patent venue requirements by making venue proper for a corporation only in a judicial district where it “has its principal place of business or is incorporated.”³²¹ The proposed legislation will restrict forum shopping by heavily limiting the number of available venues where a plaintiff can bring suit against a corporate defendant.³²² As such, the amendment will avoid undue prejudice against corporate defendants by giving better notice that suit may be brought against them.³²³ Further, the proposed legislation prohibits a party from “manufactur[ing] venue by assignment, incorporation, joinder, or otherwise.”³²⁴ Without a provision like this, a corporate defendant has an incentive to incorporate its business in the judicial district where it will have the best chance of securing a favorable judgment, at the expense of the plaintiff. Manufacturing venue in this way offends notions of fairness for the plaintiff and jeopardizes his chances of obtaining relief.³²⁵ Accordingly, the proposed legislation promotes fairness as it strikes the appropriate balance between the parties involved by restricting forum shopping by the plaintiff on the one hand and manufacture of venue by a corporate defendant on the other. As such, the legislation should ensure that the proper venue will be a neutral forum that does not unduly favor either party.

The proposed amendments to the patent venue statute will have little to no effect on harmonization of patent systems abroad because the amendments are directly targeted and focused on improving the U.S. patent system by restricting forum shopping and manufacture of venue without any international implications.³²⁶

321. Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 11(a) (2007).

322. Yan Leychkis, Comment, *Of Fire Ants and Claim Construction: An Empirical Study of the Meteoric Rise of the Eastern District of Texas as a Preeminent Forum for Patent Litigation*, 9 YALE J.L. & TECH. 193, 225 (2007).

323. *Id.*

324. H.R. 1908 sec. 11(a).

325. See *Markup of Approval of Assignment to Subcommittee Vacancies; and H.R. 1908, the “Patent Reform Act of 2007”: Hearing on H.R. 1908 Before the H. Comm. on the Judiciary*, 110th Cong. ll. 734–67 (2007) (statement of John Conyers, Chairman, Comm. on the Judiciary), <http://judiciary.house.gov/hearings/transcripts/transcript070718.pdf>.

326. See *supra* notes 321–25 and accompanying text.

4. *Interlocutory Claim Construction Appeals*

Currently, U.S. federal law allows interlocutory appeals to be made during trial if the district court's "order involves a controlling question of law as to which there is substantial ground for difference of opinion and that an immediate appeal from the order may materially advance the ultimate termination of the litigation."³²⁷ However, the appellate jurisdiction is discretionary,³²⁸ and the Federal Circuit has shown a strong disinclination to take these appeals.³²⁹ The Patent Reform Act of 2007 eliminates this discretionary component by giving the Federal Circuit jurisdiction over interlocutory claim construction appeals of all district court orders that interpret patent claims.³³⁰ This is important because an accurate interpretation of a patentee's claims determines the scope of his patent rights.³³¹ Indeed, claim interpretation is considered to be "the most fundamental inquiry" and the crux of any patent litigation proceeding.³³² As such, the pending legislation will be advantageous because it will lower the number of patent infringement cases that get reversed on appeal.³³³ Further, the legislation will help to minimize the cost and complexity of patent litigation by allowing appellate review before the parties have invested excessive time and money litigating to judgment.³³⁴

Even though the proposed legislation will likely make the U.S. patent system more efficient and cost effective, it is unlikely to have a substantial effect on harmonization of the

327. 28 U.S.C. § 1292(a)–(b) (2000). An interlocutory appeal is "an appeal that occurs before the trial court's final ruling on the entire case." BLACK'S LAW DICTIONARY 106 (8th ed. 2004) (citing 28 U.S.C. § 1292(b)).

328. 28 U.S.C. § 1292(b).

329. See Kimberly A. Moore, *Are District Court Judges Equipped to Resolve Patent Cases?*, 12 FED. CIR. B.J. 1, 28 (2002) (noting that the Federal Circuit has refused all claim construction interlocutory appeals).

330. Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 11(b); Benson, *supra* note 43, at 12–13.

331. See THOMAS & SCHACHT, *supra* note 7, at 33.

332. *Id.*

333. See *id.*

334. *Id.* at 33–34.

global patent law system.³³⁵ This is because the interlocutory claim construction appeals legislation is narrowly tailored to address congressional concerns relating to the excessiveness, expense, and complexity of patent litigation.³³⁶

5. *Inequitable Conduct Defense*

According to the doctrine of inequitable conduct, there is a duty of candor and good faith that a patentee and his representatives must exercise when filing a patent application.³³⁷ Under this standard, an individual is in breach of this duty if he misrepresents or knowingly fails to disclose material³³⁸ information regarding the patentability of a pending claim³³⁹ with the intent to deceive or mislead³⁴⁰ the patent examiner.³⁴¹ As such, an alleged infringer may raise inequitable

335. See THOMAS & SCHACHT, *supra* note 7, at 18–19, 38.

336. See *supra* notes 333–34 and accompanying text.

337. See 37 C.F.R. § 1.56(a) (2007).

338. Currently, there are multiple standards for establishing materiality. See Kevin Mack, *Reforming Inequitable Conduct to Improve Patent Quality: Cleansing Unclean Hands*, 21 BERKELEY TECH. L.J. 147, 154–55 (2006). Under one standard, “[i]nformation is material if there is a substantial likelihood that a reasonable [patent] examiner would have considered [it] important in deciding whether to allow the application to issue as a patent.” *Nilssen v. Osram Sylvania, Inc.*, 504 F.3d 1223, 1235 (Fed. Cir. 2007) (quoting *Honeywell Int’l, Inc. v. Universal Avionic Sys. Corp.*, 488 F.3d 982, 1000 (Fed. Cir. 2007)). According to a second standard, information is material if it is not cumulative of information already presented to the USPTO, and if: “(1)It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2)It refutes, or is inconsistent with, a position the applicant takes in: (i)Opposing an argument of unpatentability relied on by the [USPTO], or (ii)Asserting an argument of patentability.” 37 C.F.R. § 1.56(b)(1). Some older standards include the “but for” standard, which may be either objective or subjective, and the “but it may have” standard. *Digital Control, Inc. v. Charles Mach. Works*, 437 F.3d 1309, 1315 (Fed. Cir. 2006). Any of these standards may be implemented in order to determine whether information is material to patentability. Mack, *supra* note 338.

339. See 37 C.F.R. § 1.56(a).

340. The requisite intent may be proven by circumstantial evidence. Mack, *supra* note 338, at 155. Further, as a general matter, materiality is inversely proportional to the level of intent. *Id.* In this regard, if the information at issue is highly material, then the intent required to satisfy the inequitable conduct defense will be less culpable than otherwise. *Id.*

341. *Baxter Int’l, Inc. v. McGaw, Inc.*, 149 F.3d 1321, 1327 (Fed. Cir. 1998).

conduct as an affirmative defense,³⁴² and, if proven by clear and convincing evidence,³⁴³ all claims contained in the issued patent will be rendered unenforceable.³⁴⁴ While most instances of inequitable conduct tend to arise when a patentee or his representative fail to disclose material prior art,³⁴⁵ inequitable conduct can also occur with respect to fraudulent affidavits, misleading scientific findings, and false inventor oaths.³⁴⁶

There are concerns that the current formulation of the inequitable conduct defense creates an incentive for alleged infringers to assert the defense too frequently.³⁴⁷ In particular, this is a grave problem because the inequitable conduct defense burdens the patent litigation system by making litigation more costly and complex.³⁴⁸ There are also concerns that the materiality component of the defense does not adequately assure that information of the highest quality will be submitted to the USPTO.³⁴⁹ Unfortunately, there is a misconception that submitting a high quantity of information to the USPTO can substitute for quality.³⁵⁰ Clearly, however, a patentee cannot fulfill his duty of disclosing material information by inundating the USPTO with an excessive amount of immaterial information.³⁵¹

342. Mack, *supra* note 338, at 148.

343. *Id.* at 153 (citing *Kingsdown Med. Consultants, Ltd. v. Hollister, Inc.*, 863 F.2d 867, 872 (Fed. Cir. 1988)).

344. Mack, *supra* note 338, at 153 (citing *Lumms Indus., Inc. v. D.M. & E. Corp.*, 862 F.2d 267, 274 (Fed. Cir. 1988)). In addition, *related* claims and patents may be found to be contaminated, and therefore unenforceable, by a finding of inequitable conduct. Mack, *supra* note 338, at 153 (citing *Consol. Aluminum Corp. v. Foseco Int'l, Ltd.*, 910 F.2d 804, 809 (Fed. Cir. 1990)).

345. SCHECHTER & THOMAS, *supra* note 7, at 258.

346. *Id.* (citing Robert J. Goldman, *Evolution of the Inequitable Conduct Defense in Patent Litigation*, 7 HARV. J.L. & TECH. 37, 54, 56, 61 (1993)).

347. *See* Mack, *supra* note 338, at 155.

348. *See* THOMAS & SCHACHT, *supra* note 7, at 37.

349. *See* Mack, *supra* note 338, at 166 (discussing the role of materiality and stating that one of the primary goals of the Patent Reform Act of 2007 is to improve the quality of information the USPTO receives). It is conceivable that improving the quality of information submitted to the USPTO for examination will result in higher quality issued patents. *Id.*

350. *See id.* at 167–68.

351. *See id.*

It has been suggested that the modern inequitable conduct doctrine should be improved to address these concerns.³⁵² For example, it has been proposed that a fee-shifting mechanism should be implemented in order to address the excessive patent litigation issue.³⁵³ Under this scheme, an alleged infringer who does not prevail on his inequitable conduct claim would be required to pay all associated defense costs to the patentee, and the patentee would be awarded attorneys' fees.³⁵⁴ As such, the increased costs will create a disincentive for alleged infringers to assert the inequitable conduct defense, which will in turn diminish the cost and complexity of patent litigation.³⁵⁵ In addition, there are several proposed solutions to address the patent quality issue as it relates to the inequitable conduct defense.³⁵⁶ Such solutions include creating incentives for patentees and their competitors to disclose quality information regarding patentability,³⁵⁷ reinstating the practice of publishing abstracts in patent applications,³⁵⁸ and limiting the amount of relevant information that can be submitted to the USPTO.³⁵⁹

Under the Patent Reform Act of 2007, the elements of inequitable conduct are misrepresentation or failure to disclose material³⁶⁰ information regarding patentability with the intent to mislead³⁶¹ or deceive the patent examiner.³⁶² If inequitable conduct is established by clear and convincing evidence, then one or more of the patentee's claims will be rendered unenforceable.³⁶³ In addition, the Patent Reform Act of 2007 proposes that if an alleged infringer successfully proves

352. *See id.* at 167–72.

353. *Id.* at 172.

354. *Id.*

355. *See id.*

356. *See id.* at 166–72.

357. *See id.* at 168–72.

358. *Id.* at 171.

359. *Id.*

360. *See supra* note 338 and accompanying text. The proposed legislation implements the second standard described above for determining materiality. *See id.*

361. The requisite intent may be proven by circumstantial evidence. Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 12, § 124 (2007).

362. *Id.*

363. *Id.*

inequitable conduct, a court may limit a patentee's award to reasonable royalties or render unenforceable the inequitable claims, patent, and related claims of other patents.³⁶⁴ Further, if the inequitable conduct was committed by a registered practitioner acting on behalf of the patentee, then the USPTO, after court referral, is authorized to discipline violators³⁶⁵ by excluding or suspending them from practice.³⁶⁶

While the Patent Reform Act of 2007 complements the modern inequitable conduct doctrine and will likely deter potential violators,³⁶⁷ it will prove to have a marginal effect at best on harmonization of foreign patent systems. In the United States, a patent may be rendered unenforceable if a patent applicant submits an overly broad claim to the USPTO, while the same claim would probably be enforceable if the patent applicant sought patent protection abroad.³⁶⁸ Arguably, this lack of harmonization will create a disincentive for patent applicants to secure American patent rights³⁶⁹ because broad patent claims are commercially valuable.³⁷⁰ Any rational patent applicant would prefer a broad, enforceable patent claim in a foreign jurisdiction than an unenforceable American patent. Still, the inequitable conduct defense's effect on global patent law

364. *Id.* Accordingly, this aspect of the Patent Reform Act of 2007 will create an incentive for patentees to recognize their duty of candor and good faith toward the USPTO and deter instances of inequitable conduct altogether. *See* THOMAS & SCHACHT, *supra* note 7, at 37 (citing ADVISORY COMM'N ON PATENT REFORM, A REPORT TO THE SECRETARY OF COMMERCE 114 (1992)).

365. H.R. 1908 sec. 12, § 124.

366. 35 U.S.C. § 32 (Supp. V 2005). There are concerns that requiring the USPTO to sanction registered practitioners that engage in inequitable conduct will be unduly burdensome. *See* Mack, *supra* note 338, at 174. Instead, it has been proposed that the USPTO should implement mechanisms that it already has in place for sanctioning violators because diverting valuable resources into a separate inequitable conduct sanctioning scheme is inefficient. *See id.* Further, it is argued that a registered practitioner will be sufficiently deterred from engaging in inequitable conduct because of the risk of losing clients and tarnishing his reputation. *See id.*

367. *See* Mack, *supra* note 338, at 174.

368. *See Franklin Pierce Law Center's Eighth Intellectual Property System Major Issues Conference*, 47 IDEA 1, 27 (2006).

369. *See* Corbett, *supra* note 143, at 731-33.

370. *See* Dennis Fernandez, *Top-10 Most Common Intellectual Property Rights Mistakes During Venture Capital Due Diligence*, <http://bplan.berkeley.edu/content/documents/Top10IPRightsMistakes.pdf>.

harmonization is marginal because the defense is usually only successful when the alleged infringer can prove by clear and convincing evidence that the patentee failed to disclose prior art or was otherwise fraudulent to the USPTO.³⁷¹ Indeed, it is difficult for an alleged infringer to meet this high evidentiary burden when the facts suggest that the patentee merely submitted a broad claim to the USPTO.

IV. CONCLUSION

As it stands, the Patent Reform Act of 2007 makes a laudable attempt to promote global patent law harmonization. Even the provisions that have little to no effect on global harmonization will greatly improve the U.S. patent system on a domestic level.³⁷² These improvements may allow the U.S. patent system to serve as an ideal harmonization model during negotiations with foreign patent-granting nations.³⁷³ Further, with respect to some of the provisions that hinder global patent law harmonization, the United States may be able to leverage its bargaining power by agreeing to adopt legislation that will promote harmonization in order to persuade foreign nations to adopt the United States' point of view in other areas of patent law.³⁷⁴ Indeed, these provisions will no longer hinder harmonization if foreign trading partners include them into their patent systems.³⁷⁵ As such, the Patent Reform Act of 2007 will allow the United States to better assume its role in the international intellectual property regime with respect to the provisions that promote global patent law harmonization,³⁷⁶ make the U.S. patent system more effective and efficient on a domestic level with respect to the provisions that seemingly have no effect on global patent law harmonization,³⁷⁷ and give the United States an opportunity to persuade foreign trading

371. See Patent Reform Act of 2007, H.R. 1908, 110th Cong. sec. 12, § 124.

372. See *supra* Part III.C.

373. See *supra* Part III.B.3.

374. See *supra* Part III.B.3.

375. See *supra* Part III.B.3.

376. See *supra* Part III.A.

377. See *supra* Part III.C.

partners to adopt legislation that is unique to U.S. patent law with respect to the provisions that hinder global patent law harmonization.³⁷⁸

Although the Bush Administration has demonstrated its commitment to work with Congress to enact patent reform legislation into law,³⁷⁹ The House version of the Patent Reform Act of 2007 has not been enacted into law,³⁸⁰ and the Senate version of the bill has been removed from the Senate calendar.³⁸¹ Nevertheless, even if the House version of the bill is not enacted into law by the conclusion of the Bush Administration, the pending legislation will create an opportunity for the Obama administration to cooperate with Congress and embrace the goal of global patent law harmonization.

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378. *See supra* Part III.B.3.

379. *See* Letter from Nathaniel F. Wienecke, Assistant Sec'y for Legislative and Intergovernmental Affairs, to Patrick J. Leahy, Chairman, Comm. on the Judiciary, U.S. Senate (Feb. 4, 2008), <http://www.ogc.doc.gov/ogc/legreg/letters/110/S1145020408.pdf>.

380. *See* GovTrack.us, H.R. 1908: Patent Reform Act of 2007, <http://www.govtrack.us/congress/bill.xpd?bill=h110-1908> (last visited Nov. 1, 2008).

381. Editorial, *Patent Fight; Why a Bill on Reforming Protection of Inventions Is Worth Watching*, WASH. POST, Oct. 8, 2007, at A16; Emily Berger, *Patent Reform Act Stalls in the Senate*, ELEC. FRONTIER FOUND., May 2, 2008, <http://www.eff.org/deeplinks/2008/05/patent-reform-act-stalls-senate>.

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