

Spring 1999

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Recommended Citation

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COMMENTS

THE TWENTY-FIRST CENTURY PATENT SYSTEM IMPROVEMENT ACT: IS IT REALLY AN IMPROVEMENT?

AIMEE BOSS*

INTRODUCTION

“[T]he most damnable piece of legislation I’ve seen’ in eight years of Congress,” was how Representative Dana Rohrabacher described H.R. 400, the Twenty-First Century Patent System Improvement Act.¹ More specifically, he objected to the

* J.D. Candidate, June 1999. The author would like to thank family and friends for their support, but would especially like to thank NMC for his patience and understanding during the writing of this Comment.

1. Jim Abrams, *Bill to Change Patent Laws Brings Strong Opposition*, ASSOCIATED PRESS POL. SERV., Apr. 16, 1997, at 1, available in 1997 WL 2517370 (quoting from California Republican Representative Dana Rohrabacher). Representative Rohrabacher is one of the leaders against the amendments. *Id.* In fact, he sponsored an opposing bill, H.R. 811 which was eventually defeated in the House of Representatives on April 17, 1997. *Id.* H.R. 811 was entitled the “Patent Term Restoration Act of 1997.” *Patent Law Changes: Hearings on H.R. 400 and H.R. 811 Before the Subcomm. on Gov’t Programs and Oversight of the Comm. on Small Bus.*, 105th Cong. 16-18 (1997) [hereinafter *Patent Law Changes Hearings*] (statement of Michael K. Kirk, Executive Director of the American Intellectual Property Law Association). This bill proposed a patent term of 17 years from the issue date of the patent or 20 years from the filing date of the application, whichever would give the inventor a longer period of protection. Abrams, *supra*, at 2. It also included a few “token” provisions for the publication of some patent applications. *Patent Law Changes Hearings, supra*, at 17. For example, it allowed the Commissioner the option to publish an application that had already been published in a foreign country, but it did not provide any compensation for the inventor if a third party commercialized the technology before the patent issued. *Id.* H.R. 811 also provided for the publication of applications, but not until five years after application date and not if the applications were under appeal. *Id.* The Commissioner would have to find that the applicant was not diligently pursuing his application. *Id.* at 18. Because of the difficulty of determining which patent applications could be published under H.R. 811, Congress pushed this bill aside and began sending H.R. 400 through Congressional Committees because it seemed easier to

requirement of pre-grant publication, which is when the Patent and Trademark Office (PTO) publishes a patent application for an invention before it issues the patent.² The problem with pre-grant publication is that it may lead to an unnecessary exploitation of an applicant's rights and may also negate any trade secret protection an inventor may have had.³ Representative Rohrabacher is not alone in his displeasure with the new proposals to the patent application process.⁴ He also has the support of individual inventors, who do not wish to see Congress enact a bill requiring earlier disclosure of their secrets.⁵

Congress is trying to restructure the PTO's patent application procedures.⁶ North Carolina's Representative Howard Coble sponsored and presented to Congress the proposed amendments in H.R. 400.⁷ The proposed amendments contain several concepts to

administer. *Id.*

2. H.R. 400, 105th Cong. § 202 (1997) (amending 35 U.S.C. § 122 (1994) to contain the provision for pre-grant publication). Pre-grant publication is the publication of the patent application before the patent is issued. *Id.* Currently, the patent application is kept confidential. 35 U.S.C. § 122 (1994). Unless the applicant allows the release, or the release is necessary for an act of Congress, the patent application remains secret. *Id.* See 37 C.F.R. § 1.14 (1994) (detailing how a patent application can be accessed before the patent is issued). Only after the PTO issues the patent will it publish the invention application and make it available to the public. Carlos J. Moorhead, *Improving Our Patent System for a Stronger America*, 11 ST. JOHN'S J. LEGAL COMMENT. 465, 475-80 (Spring 1996) (discussing the current United States patent application system and how his proposed bill, H.R. 1733 (the predecessor to H.R. 400), will help to improve that system). See also ROBERT P. MERGES, *PATENT LAW AND POLICY* 30-32 (2d ed. 1992) (discussing the United States patent system).

3. See *infra* Part II.B for a discussion of the disadvantages of pre-grant publication.

4. Howard Coble, *The Spring 1998 Horace S. Manges Lecture - The 105th Congress: Recent Developments in Intellectual Property Law*, 22 COLUM.-VLA J.L. & ARTS 269, 278 (Spring 1998).

5. *Id.* at 278-79; Abrams, *supra* note 1, at 2.

6. See generally MERGES, *supra* note 2 (discussing United States patent application process). See *infra* Part I.A for a description of the patent application process.

7. In the House of Representatives, the proposed amendments are in H.R. 400. H.R. 400, 105th Cong. (1997). This bill was brought before the House on January 9, 1997. Paul Gibbons, *The Application Publication Dilemma: Should the United States Publish Patent Applications Eighteen Months After Filing to Accommodate International Patent Harmonization*, 20 SUFFOLK TRANSNAT'L L. REV. 449, 449 (Summer 1997). In the Senate, the similar amendments are contained in S. 507, titled The Omnibus Patent Act of 1997. On March 20, 1997, the Senate version of H.R. 400 was brought before the Senate. S. 507, 105th Cong. (1997). See Jeffrey E. Robertson, *If It Ain't Broke, Don't Fix It: The Unnecessary Scope of Patent Reform as Embodied in the "21st Century Patent System Improvement Act" and "The Omnibus Patent Act of 1997"*, 5 J. INTELL. PROP. L. 573, 573 (Spring 1998). On April 23, 1997, H.R. 400 passed the House of Representatives, but only after much debate and several

help change the way the PTO operates.⁸ The most controversial and debated aspect of the bill is the provision regarding the idea of pre-grant publication.⁹ Even though the bill is highly criticized, it is simply a concept modeled after other countries' patent application processes.¹⁰ Other concepts in the amendments include provisional rights for the inventor,¹¹ term extension¹² and the prior

amendments. 143 CONG. REC. H1719-03 (1997). On May 22, 1997, S. 507 was presented to the Senate Committee on the Judiciary. Coble, *supra* note 4, at 272. However, S. 507 has not been "scheduled for floor action." *Id.* at 272, 279. S. 507 contains amendments to Title 35 of the U.S.C similar to those in H.R. 400. S. 507, 105th Cong. See John F. Duffy et al., *Early Patent Publication: A Boon or Bane? A Discussion on the Legal and Economic Effects of Publishing Patent Applications After Eighteen Months of Filing*, 16 CARDOZO ARTS & ENT. L.J. 601 (1998) (discussing the differences between H.R. 400 and S. 507). Because of the difficulties the House had in passing H.R. 400, lawmakers will probably need to make similar changes if there is any possibility that S. 507 will pass the Senate.

8. H.R. 400, 105th Cong. See *infra* Part I.C for a detailed explanation of the content of H.R. 400.

9. See *supra* note 2 for a definition of pre-grant publication and the current way the PTO keeps the patent applications confidential. See *infra* Part I.C for a discussion of the proposed amendment's requirements and exceptions for pre-grant publication.

10. Moorhead, *supra* note 2, at 475. Most of the patent offices in Europe and Asia, for example the European system and the Japanese system, already have some sort of pre-grant publication as part of their patent application process. *Id.*; Toshiko Takenaka, *The Role of the Japanese Patent System in Japanese Industry*, 13 UCLA PAC. BASIN L.J. 25, 26 (1994) (discussing the Japanese patent system and how Japanese corporations work in such an aggressive system). For example, the European Patent Office (EPO) has been regulating patents since 1977 under the European Patent Convention (EPC). Edward J. Webman, *Issues Arising Under an 18 Month Publication Regime: The Initial Public Response in Light of EPC and PCT Practice*, 77 J. PAT. & TRADEMARK OFF. SOC'Y 909, 909-10 (1995). The World Intellectual Property Organization (WIPO) has been able to use pre-grant publication for patent applications since 1978 under the Patent Cooperation Treaty (PCT). *Id.* The EPO requires that a patent application be published eighteen months after its effective filing date. John C. Todaro, *Potential Upcoming Changes in U.S. Patent Laws: The Publication of Patent Applications*, 36 IDEA 309, 310 (1996). It is published again upon grant of the patent. EPC, PATENTS THROUGHOUT THE WORLD E28-E29 (West Pub. Nov. 1998). Opposition is allowed after the date of the grant. *Id.*

In Japan, there are two pre-grant publications. Takenaka, *supra*, at 26. See 2 DIGEST OF INTELLECTUAL PROPERTY LAWS OF THE WORLD: JAPAN 5-6 (1995) (stating all requirements concerning the Japanese patent application system). The first publication in Japan comes 18 months after the effective filing date. Takenaka, *supra*, at 26. The second publication comes after the examiner decides that the invention is patentable and that the patent will issue. *Id.* Similar to the European system, the Japanese system allows oppositions after the second publication. *Id.* This publication system allows Japanese companies to develop their technologies at an increased rate by using other companies' technology as soon as possible. *Id.*

11. H.R. 400, § 204 (amending 35 U.S.C. § 154 (1994)). See *infra* Part I.C for a discussion of the provisional rights of the inventor to receive

use doctrine or defense.¹³ However, the question that remains is whether these proposed amendments will help or hinder inventors in their quest for patent protection.

This Comment discusses the amendments to H.R. 400, their effect on the patent application process and their effect on inventors whose inventions are at stake.¹⁴ Part I explains how the PTO's current patent application works, the history of how pre-grant publication became an issue before Congress, and the contents of H.R. 400's proposed amendments. Part II examines the advantages and disadvantages of the proposed amendments. Part III proposes an alternate solution to the PTO's problem by offering revisions to the proposed amendments and suggestions for implementation and interpretation to help reduce confusion and unnecessary backlog in the court system.

I. THE HISTORY OF PATENT PROTECTION, THE CURRENT PATENT APPLICATION PROCEDURE, AND H.R. 400

The United States Constitution grants Congress the power to

compensation from a third party who uses his invention; Part II.A.3 for a discussion of the advantages of provisional rights; and Parts II.B.3 and II.C for discussions of the disadvantages of provisional rights for inventors.

12. H.R. 400, § 208 (amending 35 U.S.C. § 154 (1994)). See *infra* Part I.C for a discussion of term extension, the lengthening of a term of protection.

13. H.R. 400, § 302 (amending 35 U.S.C. § 28 (1994)). See *infra* Part I.C for a discussion of the prior use doctrine; Part II.A.2 for a discussion of the advantages to the prior use doctrine; and Part II.B.2 for a discussion of the disadvantages to the prior use doctrine.

14. This Comment only focuses on the most controversial issue of pre-grant publication, the effects thereof, as well as the other topics of prior user rights, provisional rights and term extension. However, the bill also proposes the establishment of the Patent and Trademark Office (PTO) as a Government Corporation, the new position of Under Secretary of Commerce, and how publication will affect prior art. H.R. 400, 105th Cong. (1997).

Section 111 of H.R. 400 changes the PTO to an entirely government owned corporation, which alters the name to the United States Patent and Trademark Office. H.R. 400 § 111 (amending 35 U.S.C. § 1 (1994)). It also changes the title of Commissioner to the title of Director. *Id.* § 113 (amending 35 U.S.C. § 3 (1994)). This transition leaves the PTO funded by application fees rather than federal subsidies. *Patent Law Changes Hearings, supra* note 1, at 2-4. Section 151 of H.R. 400 establishes, within the Department of Commerce, the position of Under Secretary of Commerce for Intellectual Property Policy. H.R. 400, § 151.

Section 205 of H.R. 400 proposes the inclusion of published patent applications as prior art. H.R. 400 § 205 (amending 35 U.S.C. § 102(e)). As prior art, these published patent applications would result in far fewer 'wasted' patent applications. *Patent Law Changes Hearings, supra* note 1, at 5. With more prior art, the chances that another inventor would waste time discovering the same thing are greatly lessened. *Id.* at 5-6. Because duplicative research can be detected early on in the patent application process, inventors will waste less time, money and energy creating a more efficient patent system. *Id.*

make laws for patent protection.¹⁵ Congress may grant an exclusive period of time to an inventor, a limited monopoly where no one else may make, use, or sell the invention.¹⁶ Congress granted this right to inventors through patent laws in order to promote discovery of new technology through new inventions.¹⁷ In addition, Congress wanted to encourage inventors to share their innovations with others to promote the progress and further development in their respective fields.¹⁸ The limited monopoly may give an inventor an extra incentive to help society and disclose his invention to the public.¹⁹ The disclosure of inventions benefits others because it keeps people from "reinventing the wheel."²⁰

15. U.S. CONST. art. I, § 8, cl. 8. "Congress shall have the Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries" *Id.* James Madison proposed this clause to the Constitutional Convention. WILLIAM H. FRANCIS & ROBERT C. COLLINS, CASES AND MATERIALS ON PATENT LAW: INCLUDING TRADE SECRETS, COPYRIGHTS AND TRADEMARKS 71-72 (4th ed. 1995). Because the Framers of the Constitution realized the issue of patent protection was so important to inventors, there was not even a debate on the issue. *Id.* at 72. Originally, the States granted patents individually. *Id.* at 71. This practice stopped after the adoption of the first patent act in 1790. *Id.*

16. U.S. CONST. art. I, § 8, cl. 8. Every patent grants the inventor the "right to exclude others from making, using, offering for sale, or selling the [claimed] invention." 35 U.S.C. § 154(a)(1) (1994) (codifying the "exclusive right" granted in the Constitution and detailing the contents of the patent for an invention). The term of protection begins on the issue date and ends 20 years from the date the inventor filed the application. *See* 35 U.S.C. § 154(a)(2) (detailing the term to which the patent is subject). The United States adopted the "twenty years from filing" term recently, on June 8, 1995, in order to comply with the General Agreement on Tariffs and Trade (GATT). Moorhead, *supra* note 2, at 465-67. *See generally* Patricia Montalvo, Comment, *How Will the New Twenty-Year Patent Term Affect You? A Look at the TRIPS Agreement and the Adoption of a Twenty-Year Patent Term*, 12 SANTA CLARA COMPUTER & HIGH TECH. L.J. 139 (Feb. 1996) (discussing the GATT-Trade Related Aspects of Intellectual Property (GATT-TRIPS) agreement, advantages and disadvantages of a twenty year patent term, and the then-current proposed legislation of H.R. 359 and H.R. 1733).

17. *See* U.S. CONST. art. I, § 8, cl. 8 (providing reasoning for the patent system). *See also* Scott Paper Co. v. Marcalus Mfg. Co., 326 U.S. 249, 255 (1945) (noting that patent system promotes the Constitution's goal).

18. Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 480-81 (1974) (suggesting that patent laws promote discovery). *See* Universal Oil Prod. Co. v. Globe Oil & Refining Co., 322 U.S. 471, 484 (1944) (stating the United States offers a limited monopoly to reward inventors and encourage disclosure); *Patent Law Changes Hearings*, *supra* note 1, at 17 (emphasizing the intent of Congress in enacting the patent laws and how pre-grant publication furthers that original congressional intent).

19. *See generally* FRANCIS & COLLINS, *supra* note 15, at 64-66 (discussing the natural rights of inventors, early laws and regulations across the world and the encouragement by governments of disclosure of inventions).

20. *Patent Law Changes Hearings*, *supra* note 1, at 17.

Congress is trying to make the PTO's patent application process more "efficient and fair."²¹ Currently, federal laws put American inventors at a disadvantage over foreign inventors because the United States does not publish foreign applications in English until the patent issues.²² In addition, there is the problem of the "patent submariner" which keeps information buried, or submarined, in the confidentiality part of the patent application process as long as possible before the patent issues.²³ The effect of both of these problems is to keep technology from the public,²⁴ which goes against the very intentions of the Framers of the United States Constitution.²⁵

In attempting to explain the bill before Congress and the ramifications of enacting that bill, Section A will discuss the PTO's current patent application process. Next, Section B will examine how pre-grant publication became an issue before Congress. Lastly, Section C will discuss the proposed amendments advanced in H.R. 400.

A. The Current Application Process

The patent application process has always been relatively simple.²⁶ An attorney or patent agent²⁷ consults with the inventor

21. Abrams, *supra* note 1, at 1; *Patent Law Changes Hearings*, *supra* note 1, at 2.

22. *Patent Law Changes Hearings*, *supra* note 1, at 4-5. Most other countries have some sort of pre-grant publication. Moorhead, *supra* note 2, at 475-76. Pre-grant publication allows inventors in their own country to have access to any patent application in their native language before the patent issues. *Id.* Part of the advantage comes from inventors having access to the publicly disclosed new technology. *Id.* American inventors must wait until the PTO issues the patent before having access to that new technology. *Id.* In a market where technology is short-lived, that extra time span could be very important in developing other related technologies and in not falling behind in the fast-paced market. *Id.*

23. Moorhead, *supra* note 2, at 484-85. A patent submariner is one who intentionally delays the issuance of the patent in order to prolong the duration of confidentiality. Donald S. Chisum, *The Harmonization of International Patent Law*, 26 J. MARSHALL L. REV. 437, 445 (1993). This allows the submariner to then go back and sue anyone who has begun to use the technology for patent infringement. Moorhead, *supra* note 2, at 485.

24. Moorhead, *supra* note 2, at 485 (discussing how patent submariner's actions actually go against the purposes of the patent clause in the U.S. Constitution).

25. FRANCIS & COLLINS, *supra* note 15, at 71-72 (discussing the Framers of the Constitution and the enactment of the patent protection clause in the Constitution).

26. MERGES, *supra* note 2, at 30-32 (discussing the United States patent system). See Bradford J. Duft, *Preparing the Patent Application*, in UNDERSTANDING BIOTECHNOLOGY LAW: PROTECTION, LICENSING, AND INTELLECTUAL PROPERTY POLICIES 94 (Gale R. Peterson ed., 1993) (discussing the patent application process).

27. A patent agent is someone who takes the patent bar exam and is

and then drafts the claims to define the alleged invention.²⁸ An inventor then files his or her application and waits for the first official office action, which is a response from the PTO.²⁹ The first action of the PTO generally refuses all claims.³⁰ Normally, the patent writer will try to gain the broadest protection for his or her client which results in the claims being too broad to fall within the limits of a patentable invention.³¹ After modifying the claims, the inventor resubmits the patent application and waits for another office action.³² One of three things then happens. First, if the PTO gives the application a final refusal, no patent issues and the inventor has the chance to take the matter up on appeal.³³

licensed to write patent applications, but is not necessarily an attorney. Patent attorneys are those who take both a state bar exam and the patent bar exam. Patent attorneys and agents must have some sort of technical background or training so that they can effectively work with an inventor to create the claims necessary for the patent application. FRANCIS & COLLINS, *supra* note 15, at 82-83. Drafting claims can be very difficult because of the special and precise language used. *Id.* Therefore, the agent or attorney must be familiar with the subject matter of the patent application. *Id.*

28. A claim defines the invention by describing the subject matter which the inventor believes patentable. 35 U.S.C. § 112 (1994). A claim also defines the scope of the patent. *Id.* Generally, an inventor will submit the broadest claim under which he or she would like protection. Duft, *supra* note 26, at 96. Claims are contained in just one section of the patent application called the specification. 35 U.S.C. § 112 (describing the contents of the specification).

29. For purposes of this Comment, office action refers to any official response from the PTO.

30. Notice of rejection is described in the United States Code. 35 U.S.C. § 132. The notice must explain the reasons for rejection and also provide enough information to help the applicant determine whether or not to pursue the application. *Id.*

31. Duft, *supra* note 26, at 96. For an invention to be patentable, it must have three characteristics: novelty; utility; and nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 12-14, 17-18 (1966) (defining the conditions for patentability). The newness and usefulness portions date back to the Patent Act of 1836. FRANCIS & COLLINS, *supra* note 15, at 79-80. *See* *Titanium Metals Corp. v. Banner*, 778 F.2d 775 (1985) (discussing the element of novelty); *Ex Parte Murphy*, 200 U.S.P.Q. 801 (1977) (discussing the element of utility). Nonobviousness, however, is more recent, having only been codified in the Patent Act of 1952. FRANCIS & COLLINS, *supra* note 15, at 80. *See* *Hotchkiss v. Greenwood*, 52 U.S. 248, 255-57, 264-67 (1850) (laying the groundwork for the future section 103). Title 35 of the United States Code incorporates this most recent patent act. 35 U.S.C. §§ 1-375 (1994). Section 103(a) defines nonobviousness as "would [not] have been obvious at the time the invention was made to a person having ordinary skill in the art to which subject matter pertains." 35 U.S.C. § 103(a). *See Graham*, 383 U.S. at 17-18 (discussing the element of nonobviousness).

32. Section 132 allows the applicant to amend the application after receiving a rejection notice and resubmit it for further examination. 35 U.S.C. § 132. Although amendments are allowed, Section 132 imposes a restriction that the applicant may not add any new matter into the disclosure. *Id.*

33. 35 U.S.C. §§ 141-46. Sections 141-46 give an applicant the right to appeal after receiving a notice of rejection. *Id.*

Secondly, the PTO may reject some of the claims but allow the inventor to modify and resubmit the application.³⁴ The third option is that the PTO accepts the application and the patent issues shortly thereafter.³⁵

If the inventor ever changed his mind and decided to keep his invention a secret, he could just withdraw the application and the information would remain confidential.³⁶ Unfortunately, this process, while simple, can take years before the patent issues.³⁷ This leaves the way open for patent submariners, who intentionally delay the issue of their patents.³⁸ The term of patent protection ends twenty years from the application filing date.³⁹ Although the patent submariner can not extend his term of protection, he does extend the time until the patent issues.⁴⁰ This generally increases the probability that an unknowing inventor or company will discover and/or begin to use similar, or even identical, technology to the technology in the submariner's patent.⁴¹ When the patent issues, the submariner can sue for patent infringement or can force the company into paying licensing fees to keep using the technology.⁴² Pre-grant publication might be one step towards the limitation of a patent submariner's manipulation of the patent application system.

34. 35 U.S.C. § 132 (allowing the applicant to amend his application).

35. 35 U.S.C. § 131 (explaining the examination of the application and if that application meets the requirements, then a patent will issue).

36. 35 U.S.C. § 102. See generally David Silverstein, *Will Pre-grant Publication Undermine United States Trade Secret Law?*, 23 AIPLA Q.J. 695 (Fall 1995) (discussing in detail how pre-grant publication will affect trade secret protection). Mr. Silverstein compares patent law with trade secret protection, discusses the Federal Preemption Doctrine and then explores the future of trade secret protection. *Id.* Trade secret protection is more difficult to enforce because it is not actually codified into a statute, but rather common law provides the remedy. *Id.* at 699 (citing RESTATEMENT (THIRD) OF UNFAIR COMPETITION § 39 cmt. b-d (1995)). Mr. Silverstein also discusses the benefit to the public if all patent applications, even those found to be not patentable, were published. *Id.* at 724. However, Mr. Silverstein stresses the importance of pre-grant publication as an element in the opposition system. *Id.* at 723. The proposed amendments contained in H.R. 400 specifically do not provide for any earlier opportunity to bring an opposition. H.R. 400, 105th Cong. § 202 (1997) (amending 35 U.S.C. § 122(c)).

37. Duft, *supra* note 26, at 95.

38. See *supra* note 23 for a definition of the patent submariner, and *infra* Part II.A.1 which discusses patent submariners, the problems they cause, and how the proposed amendments might help to remedy those problems.

39. 35 U.S.C. § 154(a)(2). See generally Montalvo, *supra* note 16, at 140-43 (discussing the twenty year term of patent protection).

40. "Only Congress can extend the term of a patent grant, and the instances in which this has been done are few." FRANCIS & COLLINS, *supra* note 15, at 593.

41. *Patent Law Changes Hearings*, *supra* note 1, at 5.

42. *Id.*

B. How Pre-Grant Publication Became Such an Issue

The concept of pre-grant publication is not new. Other countries around the world have advocated the concept for years.⁴³ Japan, in particular, is highly responsible for making pre-grant publication an important issue in the United States.⁴⁴ In 1994, Japan entered into an agreement with the United States.⁴⁵ Japan agreed to make its patent application system more accessible and easier to use if the United States agreed to a twenty-year patent term and pre-grant publication.⁴⁶ Japan had to comply by July 1, 1995.⁴⁷ As of 1996, Japan had fulfilled its end of the bargain.⁴⁸ The United States agreed to comply by January 1, 1996, but has not kept its promise.⁴⁹ Although the United States has implemented a twenty-year patent term, it has not implemented pre-grant publication.⁵⁰ Congress considered the issue of pre-grant patent publication⁵¹ in 1994,⁵² 1995⁵³ and 1996⁵⁴ without making

43. See *supra* note 10 and accompanying text for a discussion and examples of how other countries implement their pre-grant publication procedures.

44. Moorhead, *supra* note 2, at 465-67.

45. *Id.*

46. *Id.* at 471-74.

47. *Id.* at 474.

48. *Id.*

49. Moorhead, *supra* note 2, at 474.

50. *Id.*

51. In the past couple years, several bills have come before Congress concerning pre-grant publication. S. 1854, 103d Cong. (1994); S. 2488, 103d Cong. (1994); H.R. 1733, 104th Cong. (1995); H.R. 3460, 104th Cong. (1996); S. 1961, 104th Cong. (1996). Each time the bills seem on the verge of passing yet each time they do not. This year is the first time that the proposed amendments would appear to have a real chance of being enacted by Congress. 143 CONG. REC. D345-01, *D347 (1997) (showing H.R. 400 passed by voice vote).

52. Senator Dennis DeConcini presented S. 1854 and S. 2488 to Congress but neither was ever enacted. S. 1854, 103d Cong. (1994); S. 2488, 103d Cong. (1994). 6 No. 5 J. PROPRIETARY RTS. 23 (May 1994).

53. H.R. 1733, 104th Cong. (1995). In 1995, California Republican Representative Carlos Moorhead presented H.R. 1733, entitled the "Patent Application Publication Act of 1995". *Bill to Provide for Publication of Patent Applications*, 7 No. 9 J. PROPRIETARY RTS. 27 (Sept. 1995). See Todaro, *supra* note 10, at 311-14 (discussing all aspects of H.R. 1733). Even though Bruce Lehman, PTO Commissioner, heavily supported H.R. 1733, Congress never enacted it. *Id.* at 314. See Moorhead, *supra* note 2, at 481 (noting Mr. Lehman's support of H.R. 1733). Congress eventually incorporated H.R. 1733 into the new bill, H.R. 3460. *Id.* at n.a.

54. H.R. 3460, 104th Cong. (1996); S. 1961, 104th Cong. (1996). In 1996, the House Judiciary Committee passed H.R. 3460 and the Senate Judiciary Committee passed S. 1961, but Congress never enacted them. 143 CONG. REC. S2654-01, *S2679 (statement of Utah Representative Orrin Hatch that Congress never voted on S. 1961). Each bill contained similar concepts as those before Congress in 1997. *Patent Office Still Hopeful Congress Will Pass Changes*, FED. TECH. REP. 5 (Sept. 26, 1996). Michael Kirk of the AIPLA contends that the only reason Congress did not pass H.R. 3460 is that

any definitive decisions. Now, Representative Howard Coble is leading the pack with H.R. 400.⁵⁵ He has very strong support from large intellectual property groups, such as the American Intellectual Property Law Association (AIPLA),⁵⁶ as well as the support from large corporations throughout the United States.⁵⁷ These groups support Representative Coble because they believe pre-grant publication and prior user rights are imperative to make the United States' patent system more effective against people who abuse the system.⁵⁸

Those who oppose the bill are generally small businesses or independent inventors.⁵⁹ These inventors claim that pre-grant publication will give others, such as large corporations, an unfair edge by giving them premature access to their inventions.⁶⁰ Many times these "small" inventors do not have the resources to pursue those who may be infringing.⁶¹ If the PTO publicly discloses their invention before it grants any protection, this could increase the likelihood that a third party could unfairly use the invention.⁶² Representative Coble and the supporters of H.R. 400 suggest that the early interest could prove beneficial to the "small" inventors because those people who are eager to invest would have an earlier opportunity to become involved with the project.⁶³

C. H.R. 400—The Twenty First Century Patent System

Congress ran out of time at the end of the session before it could enact the bill. *Patent Law Changes Hearings*, *supra* note 1, at 2.

55. H.R. 400, 105th Cong. (1997).

56. *Patent Law Changes Hearings*, *supra* note 1, at 1-2. The AIPLA is an association mostly made up of attorneys whose fields all deal with intellectual property in some fashion. *Id.* at 2.

57. *Id.* at 8-10. Other support for Representative Coble comes from corporations that want Congress to enact the prior use defense or the reasonable royalty remedy. *Id.* Prior user rights and reasonable royalty remedy could help to keep abusers of the patent system from misusing information that would be accessible sooner due to pre-grant publication only eighteen months after the inventor files his or her application. *Id.* It seems other corporations generally supported Representative Rohrabacher's bill, H.R. 811, because it provided for similar publication without giving the inventor rights to go back and collect from the infringer. H.R. 811, 105th Cong. (1997). This might have been important to those corporations because it would have allowed them to use another inventor's technology sooner without serious repercussions. *Patent Law Changes Hearings*, *supra* note 1, at 16-18.

58. *Patent Law Changes Hearings*, *supra* note 1, at 8-10.

59. Abrams, *supra* note 1, at 1-2 (discussing briefly those who support and oppose H.R. 400).

60. *Id.*

61. *Patent Law Changes Hearings*, *supra* note 1, at 9. Because of small or independent inventors possible lack of resources, the proposed amendments suggest the idea of reducing independent inventors and small businesses fees by fifty percent. *Id.* at 5-6.

62. Abrams, *supra* note 1, at 2.

63. *Id.*

Improvement Act

H.R. 400 presents several concepts that Congress has seen before.⁶⁴ Most importantly is the issue of pre-grant publication.⁶⁵ As the proposed legislation states, subject to narrow exceptions, the PTO must publish patent applications eighteen months after the earliest effective filing date⁶⁶ whether the PTO grants the patent or not.⁶⁷ An applicant may even request earlier publication.⁶⁸ H.R. 400 contains some exceptions to the publication requirement⁶⁹ which include applications for design patents,⁷⁰ applications that are no longer pending,⁷¹ and applications filed by a "small business concern," an independent inventor, or institutions of higher education that are entitled to reduced fees.⁷² However, even if an inventor falls within these exceptions, the

64. See *supra* notes 52-54 and accompanying text for a discussion of the bills that have come before Congress which contain pre-grant publication but which Congress never enacted.

65. H.R. 400, 105th Cong. § 202 (1997).

66. *Id.* Earliest effective filing date is either the date on which the applicant files a patent application or the earlier foreign priority filing date. H.R. 400 § 302(a) (amending 35 U.S.C. § 273(a)(4) (1994)). See also *Christie v. Seybold*, 55 Fed. 69, 75-78 (1893) (discussing the priority of filing). The priority filing date is the date on which the applicant files the patent application in another country. *Application of Ekenstam*, 256 F.2d 321, 322-325 (1958) (discussing foreign filing dates and their effect on United States filing dates). The United States uses the first-to-invent system. *Kyla Harriel, Prior User Rights In a First-To-Invent Patent System: Why Not?*, 36 IDEA: J.L. & TECH. 543, 544 (1996). This allows the original or true inventor to obtain protection. *Id.* Almost all other countries use the first-to-file system. *Id.* at 545.

67. H.R. 400 § 202 (amending § 122(b)(1)).

68. *Id.*

69. *Id.* (amending § 122(b)(2)). Other exceptions include applications the PTO examines from the Atomic Energy Commission, Defense Department or other defense agencies, publication of which could be harmful to national security. *Id.* Also, the PTO shall not publish "any application that is subject to a secrecy order." *Id.*

70. *Id.* § 202 (amending § 122(b)(1)). This publication requirement does not extend to design patents filed under Title II, Chapter 16. *Id.* *Black's Law Dictionary* defines "design patent" as a patent that is of "[t]he unique appearance or design of an article of manufacture . . . [it] may be issued for both surface ornamentation or the overall configuration of an object. . . . [it may] also be copyrightable." *BLACK'S LAW DICTIONARY* 1125 (6th ed. 1990) (citing 35 U.S.C.A. § 171 (1994)).

71. H.R. 400 § 202 (amending § 122(b)(2)). The PTO will not publish any application that an inventor withdraws or that is no longer pending. *Id.* Many times an inventor will decide not to pursue his possible rights under patent protection in order to preserve any trade secret rights he may have. See *Silverstein, supra* note 36, at 699-700. Any withdrawn application remains confidential. H.R. 400 § 202.

72. *Id.* To be entitled to the exception, the small business concern, independent inventor or institution of higher education must be entitled to reduced fees under 35 U.S.C. § 41(h)(1). *Id.*

applicant can bypass these exceptions by simply requesting that the application be published.⁷³

Another major aspect of the proposed amendments is the prior use doctrine or defense.⁷⁴ This defense will help those who have been using the technology for some time, but for whatever reason decided not to obtain any patent rights.⁷⁵ The prior use doctrine allows a prior user to continue using an invention after another inventor patents the invention.⁷⁶ Term extension, where an inventor can prolong his or her patent's protection, is also included in H.R. 400.⁷⁷ Inventor's rights are another concept of the

73. H.R. 400 § 202 (amending 35 U.S.C. § 122(b)(2)(D)(i)-(iv)). Section 202 of H.R. 400 explains other circumstances in which the PTO may publish an application despite the entitlement to reduced fees. *Id.*

74. H.R. 400 § 302. Prior use occurs when one party has been using technology for which another party eventually obtains patent protection. Harriel, *supra* note 66, at 546. The commercial use must be in good faith and prior to the second party's earliest effective filing date. *Id.* The cost of obtaining a patent can be very expensive, so inventors will not always seek patent protection, hoping to rely on trade secret laws. *Id.* at 558-59. Unfortunately, "most inventions can be reverse engineered and copied once they are placed on the market." *Patent Law Changes Hearings, supra* note 1, at 8-9. See *infra* note 103 for the definition of reverse engineering. Prior user rights did once exist in United States law as part of the Patent Act of 1836. Harriel, *supra* note 66, at 548-50. See *McClurg v. Kingsland*, 42 U.S. 202, 207-11 (1843) (analyzing the old prior user rights laws). Then in 1952, Congress removed prior user rights from patent law. Harriel, *supra* note 66, at 550. Currently, the United States has no codified prior user rights. *Id.* at 547. Therefore, if a subsequent "inventor" decided to acquire patent right, he would be able to obtain an injunction to keep the first inventor from making, using or selling his invention. Most other countries give their domestic manufacturers protection by having some sort of prior use doctrine. 143 CONG. REC. H1719-03, H1720 (1997). This is especially a problem when a foreign company can obtain an injunction against a United States company in the United States, where the opposite result could not occur. *Id.* Section 302 of H.R. 400 discusses the prior use doctrine and how to use it as a defense to patent infringement. H.R. 400 § 302 (amending 35 U.S.C. Chapter 28). Under the proposed amendment, the first inventor would have a limited personal defense of prior use. *Id.* See generally Harriel, *supra* note 66 (discussing the benefits and detriments of prior use rights in the United States).

75. Harriel, *supra* note 66, at 558-59.

76. H.R. 400 § 302.

77. H.R. 400 § 208 (discussing the proposed term extension policy). The most relevant part of the section allows for an extension if the PTO takes an "unusual administrative delay". *Id.* Section 208 of H.R. 400 defines the criteria for an "unusual administrative delay." H.R. 400 § 208 (amending 35 U.S.C. § 154(b)(1)(B) (1994)). It requires the first official office action to be mailed within fourteen months, a response to a reply must be mailed within four months of receiving the reply, action from a decision of a reviewing body must be mailed four months from the date of decision, or the patent must be issued within four months of the date the applicant paid the application fee. *Id.* If the criteria are not met, the PTO will extend the patent term for each day the PTO falls behind. *Id.* The authors of H.R. 400 intended these time limits to make sure that no one receives a shorter term of protection than he

proposed amendments.⁷⁸ This proposed amendment also allows a patent owner to collect compensation of a reasonable royalty⁷⁹ from any third party who commercializes⁸⁰ his idea from the publication date to the issue date.⁸¹

or she would have received under the old system. *Patent Law Changes Hearings*, *supra* note 1, at 7. They also provided these criteria to settle a large group of opposers who said it was unlikely that the PTO would admit to an unusual delay. *Id.*

78. H.R. 400 § 402 (adding 35 U.S.C. §§ 51-59 (1994)). Section 402 of H.R. 400 discusses the inventor's rights and adds Chapter 5 entitled "Invention Promotion Services." *Id.* These rights allow an inventor to seek investors, or invention promoters, without risk of losing their rights to the invention. It defines the contract that must exist between the inventor, or customer, and states remedies for an inventor if anyone violates any of the terms. *Id.* Proposed section 51 defines "contract for invention promotion services" as "a contract by which an invention promoter undertakes invention promotion services for a customer." *Id.* Section 51 defines "customer" as "any person, firm, partnership, corporation, or other entity who . . . enters into a financial relationship or a contract with an invention promoter for invention promotion services." *Id.* "Invention promoter" is defined as "any person, firm, partnership, corporation, or other entity who offers to perform or performs for, or on behalf of, a customer any act described [below]" *Id.* Lastly, "invention promotion services" means "any act involved in (A) evaluating the invention to determine its protectability . . . (B) evaluating the invention to determine its commercial potential . . . or (C) marketing, brokering, licensing, selling, or promoting the invention or a product or service in which the invention is . . . used" *Id.*

79. H.R. 400 § 204 (amending § 154). "Reasonable royalty" is defined as "that amount which the trier of facts estimates a person desiring to use a patent right would be willing to pay for its use and a patent owner desiring to license the patent would be willing to accept." BLACK'S LAW DICTIONARY 1331 (6th ed. 1990) (citing *University Computing Co. v. Lykes-Youngstown Corp.*, 504 F.2d 518, 538 (1974)).

80. "Commercial use" is defined as "the use in the United States in commerce or the use in the design, testing, or production in the United States of a product or service which is used in commerce, whether or not the subject matter at issue is accessible to or otherwise known to the public." H.R. 400 § 302(a) (amending 35 U.S.C. § 273 (1994)). "Used in commerce" is defined as "actual sale or other arm's-length commercial transfer of the subject matter at issue or that there has been an actual sale or other arm's-length commercial transfer of a product or service resulting from the use of the subject matter at issue." *Id.*

81. *Patent Law Changes Hearings*, *supra* note 1, at 6. Section 204 of H.R. 400 provides provisional rights to patent owners if a third party:

(I) makes, uses, offers for sale, or sells in the United States the invention as claimed in the published patent application . . . or (II) if the invention as claimed in the published patent application is a process, uses, offers for sale, or sells in the United States or imports into the United States products made by that process . . . and the third party had actual notice of the published patent application. H.R. 400 § 204 (amending 35 U.S.C. § 154(2)(d) (1994)). This entitles an inventor to recover a reasonable royalty for the use from the date of publication to the date of the issue of the patent.

Id.

The purpose of the proposed amendment is to make the patent application process more "efficient and fair."⁸² If the PTO publishes all applications in English, as other countries publish applications in their own native languages, then Americans would have the same access to the new technologies as other inventors do across the globe.⁸³ Because the technology will be public, many ideas may be prematurely taken. However, by allowing the inventor to recover a reasonable royalty from any third party that unjustly commercializes the technology between the publication date and the issue date, the inventor receives a remedy he or she did not have in the past.⁸⁴ Although the proposed amendments present many improved policies, the problems of implementation and interpretation continue to plague the PTO's current rules and procedures.

II. ADVANTAGES AND DISADVANTAGES OF THE TWENTY-FIRST CENTURY PATENT SYSTEM IMPROVEMENT ACT

H.R. 400 provides for many changes to the United States patent application system.⁸⁵ Many of these concepts can be looked at from two conflicting points of view. This Part will look at both sides and weigh the apparent benefits and detriments of the proposed amendments. First, Section A discusses the advantages of H.R. 400. Next, Section B sets forth the disadvantages of the bill. Lastly, Section C analyzes which part outweighs the other.

A. Advantages of H.R. 400

The proposed amendments provide some apparent improvements to the current United States patent application system. Some of those improvements stem from the treatment of pre-grant publications, which provide the PTO with the most current prior art.⁸⁶ Prior art is any patent or patent application that is filed over one year prior to the inventor's filing date, which

82. Abrams, *supra* note 1, at 1; *Patent Law Changes Hearings*, *supra* note 1, at 2.

83. *Patent Law Changes Hearings*, *supra* note 1, at 4-5. See Moorhead, *supra* note 2, at 475-77.

84. H.R. 400 § 204. See *Forrest Lab., Inc. v. Pillsbury Co.*, 452 F.2d 621, 627 (1971) (discussing the reasonable royalty remedy in relation to trade secret protection).

85. H.R. 400, 105th Cong.

86. Black's Law Dictionary defines "prior art" as:

any relevant knowledge, acts, descriptions and patents which pertain to, but predate, invention in question. Anything in tangible form that may properly be relied on by patent office in patent cases in support of rejection on matter of substance, not form, of claim in pending application for patent. [It] may also be relied on by a court to hold a patent claim invalid, *i.e.*, not novel or not unobvious.

BLACK'S LAW DICTIONARY 1193 (6th ed. 1990) (citations omitted).

the patent examiner must consider while determining the current application's patentability.⁸⁷ This will help to avoid interferences, which are caused by duplicate patent applications from different inventors.⁸⁸ By allowing examiners and other inventors to view applications that are still pending, the inventors will become aware of the duplication.⁸⁹ The proposed amendments could help to eliminate the patent submariner by disclosing applications sooner. In addition, H.R. 400 allows a prior use defense which could be helpful against foreign companies filing in the United States. Lastly, H.R. 400's provisional rights might help inventors attract investors.

1. *Elimination of the Patent Submariner*

Currently, the "patent submariner" is a large problem affecting the patent application system.⁹⁰ Pre-grant publication will help to eliminate patent submariners by disclosing their inventions within eighteen months.⁹¹ Submariners attempt to delay the issue of their patent for as long as possible.⁹² Then, after the PTO issues the patent and fully discloses the application, the submariner will go back and bring infringement suits or demand licensing fees against anyone who may have been using that particular technology.⁹³ The early disclosure will help to prevent this type of behavior by allowing other inventors or companies from duplicating research.⁹⁴ It will also keep inventors from using technology thought to be in the public domain, later finding out their use actually constitutes an infringement against the rightful patent owner.⁹⁵

87. 35 U.S.C. § 102 (1994) (defining prior art and "conditions for patentability").

88. Black's Law Dictionary defines an "interference" as "[a] Patent and Trademark Office proceeding to determine priority of invention between two or more parties claiming patentably indistinct subject matter. [It] may be between two or more patent applicants or one or more patentees and at least one patent applicant." BLACK'S LAW DICTIONARY 814 (6th ed. 1990).

89. *Patent Law Changes Hearings*, *supra* note 1, at 4-5.

90. See *supra* note 23 and accompanying text for a definition of the "patent submariner." See generally *In re Application of Hilmer*, 424 F.2d 1108 (C.C.P.A. 1970); *In re Application of Henriksen*, 399 F.2d 253 (C.C.P.A. 1968); *Ford Motor Co. v. Lemelson*, available in 1995 WL 628330 (D. Nev. June 16, 1995); Stewart Yerton, *The Sky's The Limit*, AM. LAW., May 1993, at 64 (containing infamous examples of the work of patent submariners).

91. *Patent Law Changes Hearings*, *supra* note 1, at 5.

92. Moorhead, *supra* note 2, at 484-88 (discussing patent submariners and how they exploit the patent system).

93. *Id.* at 484-85.

94. *Patent Law Changes Hearings*, *supra* note 1, at 4-5.

95. Moorhead, *supra* note 2, at 484-85.

2. *Prior Use Defense: Elimination of Foreign Advantage in the United States System*

The prior use defense would be another major addition to Title 35 of the United States Code.⁹⁶ Lawmakers intended the prior use defense to protect someone who has been using an invention for which another party later obtains a patent.⁹⁷ Currently, the United States has no prior use defense,⁹⁸ unlike most other industrialized countries who do provide some sort of prior use defense.⁹⁹

Companies and individual inventors spend enormous amounts of money seeking patent protection.¹⁰⁰ Application fees and attorney's fees for the prosecution process to apply for a single patent may end up costing an applicant thousands of dollars.¹⁰¹ Because of this large expense, many inventors choose to forego the patent process, hoping to rely on trade secret protection.¹⁰² Unfortunately, many inventions can be reverse engineered¹⁰³ once the public has access to the invention's specifications or to the invention itself.¹⁰⁴ Any second party who could reverse engineer a product would then be free to make, use or sell the product with no restrictions.¹⁰⁵ The new "inventor" could even apply for a patent and keep the original inventor from making, using or selling the invention.¹⁰⁶

96. H.R. 400 § 302 (amending 35 U.S.C. § 28 (1994)).

97. *Patent Law Changes Hearings*, *supra* note 1, at 8.

98. Harriel, *supra* note 66, at 550. See 35 U.S.C. §§ 1-14 (1994) (stating the United States current patent policy).

99. *Patent Law Changes Hearings*, *supra* note 1, at 10. See generally Keith M. Kupferschmid, *Prior User Rights: The Inventor's Lottery Ticket*, 21 AIPLA Q.J. 213 (1993) (discussing the advantages and disadvantages of prior user rights); Lise Osterborg, *Towards a Harmonized Prior Use Right Within a Common Market Patent System*, 12 INT'L. REV. INDUS. PROP. J. COPYRIGHT L. 447 (1981) (discussing prior user rights across the globe).

100. *Patent Law Changes Hearings*, *supra* note 1, at 9.

101. Duft, *supra* note 26, at 93-94 (discussing patent prosecution procedure in the United States). Patent prosecution refers to the entire application process, from the filing date through the issue date. *Id.* It includes all responses to office actions, interferences, etc. *Id.*

102. *Patent Law Changes Hearings*, *supra* note 1, at 9. See generally Silverstein, *supra* note 36 (discussing trade secret laws and protection).

103. Reverse engineering refers to the process by which someone can look at or take apart a publicly available product and discover the inventor's secret. J. THOMAS MCCARTHY, MCCARTHY'S DESK ENCYCLOPEDIA OF INTELLECTUAL PROPERTY 379 (2d ed. 1995).

104. *Patent Law Changes Hearings*, *supra* note 1, at 8-9.

105. MCCARTHY, *supra* note 103, at 379. Reverse engineering of a trade secret is not infringing because it "is legitimate and legal competitive behavior." *Id.* See *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 476 (1974) (stating that discovery of a trade secret by means of reverse engineering is fair and honest).

106. *Patent Law Changes Hearings*, *supra* note 1, at 8-10.

The prior use defense would give the original inventor a defense to a patent infringement claim by the second "inventor."¹⁰⁷ The original inventor must meet three criteria to invoke the prior use defense.¹⁰⁸ First, the inventor must have reduced the invention to practice¹⁰⁹ before the effective filing date of the patent application.¹¹⁰ Second, the inventor must have completed a portion of the investment to commercially use the invention before the effective filing date.¹¹¹ Finally, the inventor must have used due diligence in completing the remainder of the activities required even if they are after the effective filing date of the second party's patent application.¹¹² Then, the original inventor would be able to continue to use, make or sell the invention.¹¹³

3. Opportunities to Attract Investors

Supporters of the proposed amendments also suggest that pre-grant publication will give investors an earlier opportunity to invest in a particular invention.¹¹⁴ Investors who seek opportunities to invest in innovations will be able to access inventions much sooner than if they had to wait until the patent issued.¹¹⁵ This early access will allow the investors to work with the inventor to commercialize the product while the application is still pending.¹¹⁶ By the time the patent issues, the inventor could be much further along in promoting the product than if he had waited until the PTO issued the patent.¹¹⁷

H.R. 400 also makes it easier for inventors to deal with possible investors by setting rigid requirements for investors to follow.¹¹⁸ Investment contracts must be in writing and must state

107. *Id.* at 9-11.

108. H.R. 400 § 302. These requirements define the "effective and serious preparation" needed to be able to use the prior use defense. *Id.*

109. "Reduction to practice" takes place "when [an] inventor's conception is embodied in such [a] form as to render it capable of practical and successful use . . . [b]ut device need not be perfect or [a] commercial success." BLACK'S LAW DICTIONARY 1280 (6th ed. 1990).

110. H.R. 400 § 302 (amending § 273(c)(3)(A)).

111. *Id.* The inventor must complete a "significant portion of the total investment [as well as make a] commercial transaction in the United States in . . . preparation to use the [invention]." *Id.*

112. *Id.* (amending § 273(c)(3)(B)). Investment activities are among the remaining required activities. *Id.* The inventor must also "promptly [begin its] commercial use of the subject matter[.]" *Id.*

113. *Patent Law Changes Hearings, supra* note 1, at 10-11.

114. *See Abrams, supra* note 1, at 2 (discussing investment opportunities for inventors under the proposed amendments).

115. *Patent Law Changes Hearings, supra* note 1, at 10-12.

116. *Id.*

117. *Id.*

118. H.R. 400, 105th Cong. § 402 (1997).

the usual business practice of the investor.¹¹⁹ Any contract must also give the inventor the right to cancel the contract by sending a letter.¹²⁰ Investors need to include certain "mandatory terms" in all contracts such as terms of payment, full description of services, estimated earnings and a time schedule.¹²¹ Lastly, the proposed amendment gives an inventor a harsh remedy with a presumption of injury against an investor who violates a term of the contract.¹²²

B. Disadvantages of H.R. 400

Although the proposed amendments might sound like an excellent addition to Title 35 of the United States Code, Congress must consider other factors. The proposed amendments could lead to the destruction of trade secret protection. The proposed amendments could also lead to the invasion of patent owners' rights through the prior use defense. Lastly, H.R. 400 could give way to an unfair advantage by allowing early access to inventions.

1. Destruction of Trade Secret Protection

One of the main concerns with the proposed amendments is that pre-grant publication will destroy trade secret rights.¹²³ Once the PTO publishes the application, the public has access to the full disclosure of the entire invention or industrial process.¹²⁴ This occurs whether or not the PTO finds the patent application to be patentable.¹²⁵ While there are exceptions to the pre-grant

119. *Id.* (adding 35 U.S.C. §§ 51-59 (1994)). Usual business practice can refer to how many contracts an investor will seek or how many phases a contract will be executed in. *Id.* (referencing new section 35 U.S.C. § 52(b)(1)). It should also contain the usual terms and fees used by the investor. *Id.* (referencing new section 35 U.S.C. § 52(b)(2)).

120. *Id.* (referencing new section 35 U.S.C. § 52(c)). Every "customer shall have the right to terminate a contract . . . by sending a written letter stating the customer's intent to cancel[.]" *Id.* This must occur no more than five business days after the inventor executes the contract. *Id.*

121. *Id.* (referencing new section 35 U.S.C. § 55(a) (1994)). These mandatory terms must be in bold type and at least 12-point size. *Id.* These terms are included in this manner to keep an investor from hiding an important detail from the inventor in the fine print on the back of a page. *See id.*

122. *Id.* (referencing new section 35 U.S.C. § 56 (1994)). If the investor violates any term of the contract, Section 56 provides the inventor with an automatic award of damages. *Id.*

123. *Patent Law Changes Hearings, supra* note 1, at 5.

124. H.R. 400 § 202 (amending 35 U.S.C. § 122(b)(1) (1994)). The publication of the patent application discloses the entire application. *Id.* Once published, anyone would be able to access the information in the patent application. *Id.*

125. *Id.* (amending 35 U.S.C. § 122 (1994)). Patentability or a patentable invention is "[s]uitable to be patented; entitled by law to be protected by the issuance of a patent." *Id.* "[T]o be patentable, a device must embody some new idea or principle not before known, and it must be a discovery as distinguished from mere mechanical skill or knowledge." BLACK'S LAW DICTIONARY 1125 (6th ed. 1990) (citing *In re Herthel*, 104 F.2d 824, 826

publication rule,¹²⁶ the exceptions are very limited and difficult to meet.¹²⁷

One exception to pre-grant publication requires that the application concern national security, which does not affect the average inventor.¹²⁸ Another exception only applies to those inventors who are entitled to reduced fees under 35 U.S.C. § 41(h)(1).¹²⁹ However, this exception does not apply if the inventor intends to file the patent application in a foreign country.¹³⁰ Because 70% to 80% of inventors file abroad, only very few inventors will actually be able to use this exception.¹³¹

If the PTO never grants the patent, then the inventor seeking patent protection will have lost any right to trade secret protection he or she may have had.¹³² The only way to avoid this disastrous result is to withdraw the application before the publication date.¹³³ If a disclosure is made, the inventor may only rely on the prior use defense.

2. *Prior Use Defense: Unfair Invasion of Patent Protection*

The prior use defense discussed above also has some negative aspects. The AIPLA contends that inventors will rarely use the defense because the restrictions on the defense are so rigid.¹³⁴ The group also suggests that the prior use defense should not be overlooked simply because inventors will use it sparingly.¹³⁵ The AIPLA also indicates that the possibility of the defense will "take the pressure off" inventors or companies who do not want to

(C.C.P.A. 1939)).

126. See *supra* notes 69-73 and accompanying text for a discussion of the exceptions to the pre-grant publication rule.

127. H.R. 400 § 202 (amending 35 U.S.C. § 122 (1994)).

128. *Id.* (amending 35 U.S.C. § 122(b)(2)(B) (1994)).

129. *Id.* (amending 35 U.S.C. § 122(b)(2)(D) (1994)).

130. *Id.*

131. Duffy et al., *supra* note 7, at 616.

132. *Patent Law Changes Hearings*, *supra* note 1, at 5. Michael Kirk, spokesman for the AIPLA, suggests that the amendments actually took care of the concern about the destruction of trade secret protection. *Id.* He states that some independent inventors and small businesses will be able to delay publication until three months after the second office action, which may state a response to the question of patentability. *Id.* Of course, this too, has exceptions. *Id.* Those exceptions include a certification that the invention would not be subject to disclosure in a foreign application, nor would the applicant be able to claim the benefit of an earlier filing date. *Id.* See generally Silverstein, *supra* note 36 (discussing trade secret laws and protection).

133. H.R. 400 § 202 (amending 35 U.S.C. § 28 (1994)) (exempting withdrawn applications from the publication requirement).

134. *Patent Law Changes Hearings*, *supra* note 1, at 10.

135. *Id.* at 10-11. See Harriel, *supra* note 66, at 565 (discussing the probability of the sparse use of the prior use defense).

explore patent protection.¹³⁶ This defense will give that particular company or inventor a sort of limited license to use the invention without the permission of the owner of the patent.¹³⁷ This takes away the very protection, the limited monopoly, that our patent system is designed to award. The patent system is supposed to protect the full rights of patent owners by giving them the right to exclude all others from making, using, selling or offering to sell the inventions which were patented.¹³⁸ Furthermore, the proposed amendment does not propose any restrictions on this "limited license."¹³⁹ It allows the original inventor to not only keep rights to the now-patented invention, but it also allows the prior user to fully market and expand the operation even though another has the legal right to the patent.¹⁴⁰ The availability of this expansion could lead to the negation of all the patent owner's rights under the patent and possibly keep the patent owner from enjoying the benefit of his or her invention. Bruce Lehman, Commissioner of Patents and Trademarks, suggests that the prior use defense will make the patent protection system more fair.¹⁴¹ But, is it fair to minimize rights given under the very system originally designed to protect the creator of an invention?

3. *Early Access Gives an Unfair Advantage to Others*

Small-scale inventors are also concerned that large corporations might attempt to steal their ideas before the PTO grants their patents.¹⁴² Because the proposed amendments would require full disclosure of an invention only eighteen months after filing, corporations, along with others, have full access to these innovations.¹⁴³ Because ideas may be unfairly taken, the proposed amendments need to supply a recourse for the inventor.

H.R. 400 provides a remedy to an inventor when a third party takes an idea and commercializes it.¹⁴⁴ In the proposed amendments, the original inventor is given the right to receive a reasonable royalty from another party who unfairly

136. *Patent Law Changes Hearings*, *supra* note 1, at 10-11.

137. *Id.* at 11-12.

138. 35 U.S.C. § 154 (1994) (explaining the rights of the patent owner).

139. H.R. 400, 105th Cong. § 302(a) (1997) (amending 35 U.S.C. § 273 (1994)).

140. *Id.*

141. 143 CONG. REC. H1719-03, H1721 (1997) (considering a letter of opinion from Mr. Bruce A. Lehman, Assistant Secretary of Commerce and Commissioner of Patents and Trademarks submitted into the record by Representative Lofgren of California).

142. Abrams, *supra* note 1, at 1-2 (discussing the concerns of small inventors).

143. H.R. 400 § 202 (amending 35 U.S.C. § 122 (1994)).

144. *Id.* § 204 (amending 35 U.S.C. § 154 (1994)).

commercializes his or her idea.¹⁴⁵ However, it is not realistic for an independent inventor or even a small-scale business to sue a large group of people or even a large corporation who takes the inventor's idea. Such small-scale inventors probably do not have the resources to pursue these "thieves."¹⁴⁶

C. Weighing Advantages and Disadvantages to Help Determine the Best Solution

Clearly, there are both positive and negative implications to the proposed amendments to Title 35 of the United States Code. H.R. 400 provides for pre-grant publication which makes the United States comply with its agreement with Japan.¹⁴⁷ It also brings the U.S. patent application process into accord with those of the rest of the world. In doing so, a remedy should be given to an inventor for someone who abuses this early disclosure by stealing an idea. This bill provides for the "reasonable royalty remedy."¹⁴⁸ However, this remedy may prove difficult to enforce.

Suppose an individual inventor creates a new widget that everyone wants. If the specifications are disclosed, anyone can take that idea and exploit it knowing they will only have to pay some fee later if a patent infringement suit is ever brought.¹⁴⁹ If this widget is a great idea and many large corporations acquire it, is it realistic for a single inventor to sue all these large corporations? Probably not.¹⁵⁰ The award of a reasonable royalty may, in fact, deprive the inventor of the invention's true royalties if the application of the idea turns out to be much greater in scope than the inventor originally believed. This deprivation might especially be important if the "reasonable royalty" was already paid and the inventor was not adequately compensated.

H.R. 400 also provides a prior use defense.¹⁵¹ This defense could prove useful when a foreign company files a patent infringement suit in the United States. However, knowing that this defense is available may discourage inventors from even obtaining patents. This possibility directly contradicts the stated

145. *Id.*

146. *Patent Law Changes Hearings*, *supra* note 1, at 9. Because of the high costs of patent prosecution, a small inventor with an equally small amount of capital may not have the resources to bring and carry out infringement suits against large corporations. *Id.*

147. H.R. 400 § 202 (amending 35 U.S.C. § 122 (1994)).

148. *Id.* § 204 (amending 35 U.S.C. § 154 (1994)).

149. *See id.* (stating the remedy for this misappropriation as only a reasonable royalty).

150. *Patent Law Changes Hearings*, *supra* note 1, at 9. Due to the high costs an inventor can incur, he or she may not have the resources to go after many infringers. *Id.*

151. H.R. 400 § 302 (amending 35 U.S.C. § 28 (1994)).

purpose of the patent system.¹⁵² This defense may also interfere with the rights of patent owners by mandating a compulsory license for the prior user.¹⁵³ Although pre-grant publication legislation is necessary to harmonize the United States patent system with the rest of the world's patent systems, there may be a way to use these ideas and interpret the new rules in a manner that maximizes the bill's advantages.

III. REMOVING THE PRIOR USE DOCTRINE AND REMINDING THE COURTS TO LOOK AFTER THE SMALL INVENTORS

Because the new proposed amendments may not be the best solution for everyone, altering some of the proposed amendments could solve some of the problems that the current H.R. 400 might cause. Perhaps another way to address the proposed amendments is to determine a sound method of interpreting and enforcing H.R. 400. A change must be made. As it stands, H.R. 400 may harm rather than benefit small-time inventors.

Pre-grant publication is a necessary element of any future legislation involving Title 35 of the United States Code. While it is important to have a solid national patent application system, it is also important to move toward harmonizing global patent systems and laws.¹⁵⁴ In addition, the United States' agreement with Japan requires the United States to install pre-grant publication.¹⁵⁵ Perhaps the PTO could publish patent applications only after patentability has been determined, but the patent has not yet issued. If an invention is not patentable, then it will not be published and the inventor may preserve the confidentiality of his creation as a trade secret. This might help to resolve the problem of destruction of trade secret protection.

Along with this early publication policy, there must be a right for the inventor to recover from another who misuses the information and exploits the claimed invention. H.R. 400 does provide for a reasonable royalty remedy, but this remedy may not be adequate to prevent the misappropriation of inventor's ideas.¹⁵⁶ The proposed amendments should contain an additional penalty

152. U.S. CONST. art. I, § 8, cl. 8. See *supra* notes 17-21 and accompanying text for a discussion of the purpose of the patent system.

153. Harriel, *supra* note 66, at 545-47.

154. See generally William T. Fryer, III, *Patent Law Harmonization Treaty Decision Is Not Far Off—What Course Should The U.S. Take?: A Review of the Current Situation and Alternatives Available*, 30 IDEA: J.L. & TECH. 309 (1990) (discussing patent law harmonization and how it would affect U.S. patent law).

155. James E. Hudson, III, Comment, *The U.S.-Japan Agreement for Eighteen Month Publication of U.S. Patent Applications: How Should it be Implemented?*, 5 J. INT'L L. & PRAC. 87 (1995). See Moorehead, *supra* note 2, at 465-67 (discussing the United States' agreement with Japan).

156. H.R. 400, 105th Cong. § 204 (1997).

for someone who commercializes another's invention having gained that information from a published patent application. The proposed amendments make it too easy for a company to just take another's idea and put it to use. The misappropriator knows that some day, if ever discovered, he or she may have to pay this "reasonable royalty" to the true inventor.¹⁵⁷ A reasonable royalty is the lowest form of monetary recovery in a patent suit. In some cases of exceptional bad faith, the court can impose extra penalties on the infringing party. This type of penalty should be clearly delineated in the amendments. Extra monetary penalties or perhaps even some sort of criminal penalties would help to prevent misappropriation.

The other major problem with H.R. 400 stems from the prior use doctrine.¹⁵⁸ The United States does not need a prior use doctrine. Other countries use this doctrine because their systems are based upon the "first-to-file" concept.¹⁵⁹ Because the United States has a "first-to-invent" system, this doctrine, or defense, is not necessary.¹⁶⁰ While they may protect United States' inventors from foreign inventors who patent an unpatented invention currently in use in the United States, the complications that will occur because of these prior use rights far outweigh the benefits that they may create.¹⁶¹

The prior user rights were also created so that a second inventor who uses a claimed invention in good faith after the patent application is filed will have a limited license to continue that good faith use.¹⁶² However, when used in conjunction with pre-grant publication, confusion might arise. How will an inventor be able to distinguish between someone who uses the claimed invention in good faith and someone who uses the information because he read the patent application and is actually misusing that information for his or her own benefit? Because the original inventor may not easily be able to answer this question, the inventor will have to bring a patent infringement suit every time misuse is suspected. This will create more cases for the already overloaded court system. Most likely, it will also cause both plaintiffs and defendants to spend more money when trying to prove good versus bad faith. Before pre-grant publication, an inventor might have had an easier time showing whether another

157. *Id.*

158. *Id.* § 302 (amending 35 U.S.C. § 28 (1995)).

159. Harriel, *supra* note 66, at 543, 556-57.

160. *Id.* at n.15.

161. See *supra* notes 134-41 and accompanying text for a discussion of the negative aspects of the prior use defense.

162. Harriel, *supra* note 66, at 554-56 (discussing reasons for the creation of prior user rights and how those rights affect inventors who are the "prior user").

inventor came across the information independently or whether the other inventor misappropriated the patent application. With the addition of pre-grant publication, it will be much more difficult for a defendant to prove that the information did not come from a misappropriated patent application.

H.R. 400's provisions allowing early access to information and prior use rights only invites misuse of the patent application system.¹⁶³ Knowing that an inventor can rely on the prior use defense, an inventor may choose to forego the patent system and keep his or her innovations secret. The patent system is supposed to promote disclosure. If inventors decide to rely on the prior use defense, inventors may actually decide to disclose less information to the public.

CONCLUSION

H.R. 400's sponsors and supporters have correctly determined the PTO is in need of reform. The United States patent application system falls behind when compared to other countries' systems. The application process, although simple, is slow. Currently, a patent applicant can easily manipulate the PTO's rules for self-serving ends. However, enacting the Twenty-First Century Patent System Improvement Act in its entire modified form may not be the best solution for everyone, especially those small inventors most in need of protection.

H.R. 400 might seem to solve some of the PTO's problems by providing for pre-grant publication and the "reasonable royalty remedy." However, it may create more problems for inventors who are trying to protect their patent rights because it does not adequately address the application of these concepts in conjunction with current PTO rules. H.R. 400 also falls short with its proposal of the prior use defense.

These shortcomings leave a large burden on the court system. Courts will have more infringement suits and will have to distinguish between an accused infringer's bad faith and good faith. More importantly, the courts will be left with the power to determine how these changes will affect inventors across the country.

Congress enacted H.R. 400 and presumably will enact the corresponding Senate bill, S. 507, as amended. This is unfortunate because while it may appear to cure some problems for the government, it leaves wide gaps for inventors to fall in. H.R. 400 could help to truly improve the United States patent system by providing inventors with stricter penalties for infringers. Also, removing the prior use defense from the new amendments could reduce confusion and problems for inventors by

163. H.R. 400, 105th Cong. (1997).

making it easier to determine who is wrongfully infringing a patent. These alterations form a more sound way to implement pre-grant publication and leave inventors with rights that will truly benefit them.

