

Recent Developments

The Rush to a First-to-File Patent System in the United States: Is a Globally Standardized Patent Reward System Really Beneficial to Patent Quality and Administrative Efficiency?

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I. INTRODUCTION

Patent reform in the United States was the focus of a major legislative push in 2005 with the introduction of the Patent Reform Act of 2005 in the House of Representatives.¹ The bill was introduced by Representative Lamar Smith, Chairman of the Subcommittee on Courts, the Internet and Intellectual Property, and was cosponsored by five other House members.² Representative Howard Berman, one of the cosponsors and former chair of the subcommittee, commented that the motivations behind the reform bill were to alleviate concerns about patent quality and patent litigation abuse and to take steps toward global patent harmonization.³ Ultimately, work on the bill was sidelined in the fall due in part to apparent disagreements among the various industry groups backing the legislation.⁴ Still, the patent reform movement

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1. Patent Reform Act of 2005, H.R. 2795, 109th Cong. (2005).
2. See 151 CONG. REC. E1160 (daily ed. June 8, 2005) (statement of Rep. Berman).
3. See *id.*
4. See J. Matthew Buchanan, *House Subcommittee Hearing on Patent Reform – Compromise and Controversy*, Sept. 15, 2005,

continues to carry substantial momentum, as exemplified by the recent proposed changes to U.S. Patent and Trademark Office (USPTO) rules,⁵ and the introduction this year of a Senate bill advocating changes to the patent system⁶ and another version of a patent reform bill in the House.⁷ In this climate, we are virtually assured of continuing reform efforts.

The changes introduced in 2005 are comprehensive in nature and would have a significant impact on how businesses, both large and small, use U.S. patent laws. One of the most significant proposed changes in the Patent Reform Act was a switch from the current “first-to-invent” standard to a “first-to-file” standard in determining who should be awarded a patent.⁸ Another bill, as part of recently introduced legislation in the Senate, also advocates adoption of a first-to-file standard.⁹ The first-to-file system is presently the standard being used in both Japan and Europe, and proponents view the switch to a first-to-file standard as an important step in harmonizing our patent laws with the standards used in Europe and Japan.¹⁰

Regardless of which standard is viewed as better in the long-term, it is clear that changing the current patent system from a first-to-invent standard to a first-to-file standard will almost certainly decrease the quality of patents and increase

http://promotetheprogress.com/archives/2005/09/house_subcommit_5.html.

5. See Changes to Practice for Continuing Applications, Requests for Continued Examination Practice, and Applications Containing Patentably Indistinct Claims, 71 Fed. Reg. 48 (proposed Jan. 3, 2006) (to be codified at 37 CFR pt. 1); Changes to Practice for the Examination of Claims in Patent Applications, 71 Fed. Reg. 61 (proposed Jan. 3, 2006) (to be codified at 37 CFR pt. 1).

6. See Protecting America’s Competitive Edge Through Education and Research Act of 2006, S. 2198, 109th Cong. § 321 (2006).

7. See Patents Depend on Quality Act of 2006, H.R. 5096, 109th Cong. (2006). The Act, introduced April 5, 2006, contains a shortened set of the changes proposed by the 2005 Patent Reform Act. The Act does not include a change to the first-to-file standard; however, the House Subcommittee has scheduled hearings on this issue.

8. See Patent Reform Act of 2005, H.R. 2795, 109th Cong. § 3 (2005). Note, however, that the Patent Act of 2005 actually adopted a modified first-to-file rule, in which a vestigial first-to-invent rule remained for those situations in which the claimed invention was patented or described in a printed publication or otherwise publicly known one year or less before the effective filing date of the claimed invention.

9. See S. 2198 § 321(3)(A).

10. See 151 CONG. REC. E1160 (daily ed. June 8, 2005) (statement of Rep. Berman).

the costs of patent litigation in the United States. Any time there is a fundamental upheaval in the basic rules governing a legal system, there is a transition cost incurred to change from the status quo to the new system. Companies, inventors, patent attorneys, and the USPTO will all need to learn the new rules and new regulations will need to be created to fill the gaps in these new laws. The costs of patent litigation in the short term will certainly increase as the uncertainty associated with how the new laws will be interpreted and applied by the courts works its way through the legal system and new case law is generated. These short-term transition costs might be acceptable if they are ultimately outweighed by the long-term benefits of making such a fundamental change. Unfortunately, attempting to achieve global patent harmonization by adopting a first-to-file standard in the United States will not achieve the desired long-term goals of improving patent quality, improving administrative efficiency at the USPTO, and providing a better system for rewarding innovation.

II. FIRST-TO-INVENT AND FIRST-TO-FILE STANDARDS

“First-to-invent” and “first-to-file” represent two different standards for determining which inventor is entitled to the grant of a patent.¹¹ In the United States, first-to-invent is the established regime.¹² The inventor who is first to complete the act of invention will have superior rights to later inventors so long as the first inventor did not abandon, suppress, or conceal the invention.¹³ In the first-to-invent system, the act of filing

11. See generally 2 R. CARL MOY, *MOY'S WALKER ON PATENTS* §§ 8:35-8:36 (4th ed. 2003).

12. See 35 U.S.C. § 102(a) (2000) (“A person shall be entitled to a patent unless the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, *before the invention* thereof by the applicant for patent.” (emphasis added)); 35 U.S.C. § 102(g)(2) (“A person shall be entitled to a patent unless . . . *before* such person's *invention* thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it.” (emphasis added)).

13. See 35 U.S.C. § 102(g)(2). “Inventions are essentially specialized forms or knowledge; stated in basic theoretical terms, an invention is simply knowledge of how technology may be applied to achieve a particular beneficial result.” 1 MOY, *supra* note 11, § 1:27. “Courts have repeatedly asserted that the person who conceives of the invention is the inventor regardless of who else contributes to the invention finally being completed. . . . [U]nder the usual view inventorship does not attach from the act of accomplishing a reduction to practice.” 3 MOY, *supra* note 11, § 10:11.

the patent application is not controlling, although in practice, it usually approximates the relative dates of invention.¹⁴

Because the act of filing is not solely determinative of the right to obtain a patent, factual issues as to the making of the invention must be resolved in the event there is a potential question of priority of invention.¹⁵ In cases in which two or more applicants submit patent applications close in time and claim the same or substantially similar subject matter, resolution of which inventor was actually the first to invent is handled in an administrative proceeding called an interference.¹⁶ In patent litigation, first-to-invent issues can arise as one of the challenges to patent validity.¹⁷ In both forums, the inquiry as to the dates of invention involves examining corroborating evidence.¹⁸

The first-to-file system, by contrast, rewards the act of filing for patent protection by granting superior rights to the inventor who first files a sufficient patent application.¹⁹ One of the main arguments advanced in favor of the first-to-file regime lies in the administrative efficiency of not having to resolve factual disputes related to dates of invention.²⁰ In theory, the

14. See 2 MOY, *supra* note 11, § 8:36.

15. See generally *id.* § 8:34.

16. See 35 U.S.C. § 135 (2000); 37 C.F.R. §§ 1.601-1.690 (2005); see also 2 MOY, *supra* note 11, § 8:34. An interference is a proceeding directed at determining the first to invent as among the parties to the proceeding, involving two or more pending applications naming different inventors or one or more pending applications and one or more unexpired patents naming different inventors. See 37 C.F.R. § 1.601(i). The first of many to reduce an invention to practice around the same time will be the sole party to obtain a patent, unless another was the first to conceive and later coupled his conception to his reduction to practice with reasonable diligence. See *Radio Corp. of Am. v. Radio Eng'g Labs., Inc.*, 293 U.S. 1, 2 (1934); *Hull v. Davenport*, 90 F.2d 103, 105 (C.C.P.A. 1937).

17. In such situations, an alleged infringer offers evidence to show prior invention by someone other than the patentee. See 2 MOY, *supra* note 11, § 8:34.

18. See *Kridl v. McCormick*, 105 F.3d 1446, 1449-50 (Fed. Cir. 1997) (stating that “[c]onception must be proved by corroborating evidence which shows that the inventor disclosed to others his ‘complete thought expressed in such clear terms as to enable those skilled in the art to make the invention’” (citation omitted)); see also 37 C.F.R. § 1.608(b) (explaining that the evidence includes “affidavits by the applicant, if possible, and one or more corroborating witnesses, supported by documentary evidence, if available”).

19. See 2 MOY, *supra* note 11, § 8:36.

20. See *id.*

issue of which of two or more competing inventors should be entitled to a patent for an otherwise patentable invention is determined simply by looking to which inventor first filed a patent application for the invention.²¹ Although the first-to-file standard appears to elevate the value of filing patent applications over the actual inventive process, first-to-file patent systems typically include legal doctrines, such as prior user rights, suggesting that such systems do not necessarily value filing over inventing.²² The first-to-file standard in other countries typically awards compulsory licenses to persons, other than the patentee, who were sufficiently active prior to the date on which the application for patent was filed.²³ The “net effect” is to authorize the recognition of certain rights, albeit inferior to the patentee’s rights, in persons who were not first to file.²⁴

Because the first-to-invent and first-to-file standards use such different sets of operative facts, the respective patent systems in which these standards are implemented tend to drive correspondingly different behaviors in those seeking to use the patent systems. For example, an inventor operating under the first-to-invent rules will tend to gather corroborating evidence of the key dates and perform due diligence to support the dates of conception and reduction to practice of an invention.²⁵ Under the first-to-file rules, however, inventors will simply rush to prepare and file a patent application as soon as practicable after conceiving of an invention, so as to preserve their rights to obtain patent protection.²⁶

III. DIFFERENT WAYS TO REWARD INNOVATION

Every country’s patent laws are the unique product of that country’s socioeconomic and business environments, and they are designed to reward innovation as part of the overall economic, legal, and social matrix for the country. The first-to-

21. *See id.*

22. *See id.*

23. *See id.* n.11.

24. *See id.*

25. *See, e.g.,* Shu-Hui Chen v. Bouchard, 347 F.3d 1299, 1308-12 (Fed. Cir. 2003).

26. *Cf.* Charles L. Gholz, *First-to-File or First-to-Invent?*, 82 J. PAT. & TRADEMARK OFF. SOC’Y 891, 895 (2000) (claiming that under a first-to-file system “the average time between Eureka! and filing will go down in the United States”).

invent and first-to-file standards represent two such methods for rewarding innovation. Over the last twenty years, a large volume of literature has been generated arguing the pros and cons of the two patent systems.²⁷ The debate between these

27. See, e.g., Mark T. Banner & John J. McDonnell, *First-to-File, Mandatory Reexamination, and Mandatory "Exceptional Circumstance": Ideas for Better? Or Worse?*, 69 J. PAT. & TRADEMARK OFF. SOC'Y 595 (1987); Coe A. Bloomberg, *In Defense of the First-to-Invent Rule*, 21 AIPLA Q.J. 255 (1993); Sean T. Carnathan, *Patent Priority Disputes – A Proposed Re-Definition of "First-to-Invent"*, 49 ALA. L. REV. 755 (1998); Ned L. Conley, *First-to-Invent: A Superior System for the United States*, 22 ST. MARY'S L.J. 779 (1991); Donald R. Dunner, *First to File: Should Our Interference System Be Abolished?*, 68 J. PAT. & TRADEMARK OFF. SOC'Y 561 (1986); 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 309 (1989-90); Gholz, *supra* note 26; Gabriel P. Katona, *First-to-File – Not in the United States*, 73 J. PAT. & TRADEMARK OFF. SOC'Y 399 (1991); Charles R.B. Macedo, *First-to-File: Is American Adoption of the International Standard in Patent Law Worth the Price?*, 18 AIPLA Q.J. 193 (1990); Gerald J. Mossinghoff, *The U.S. First-to-Invent System Has Provided No Advantage to Small Entities*, 84 J. PAT. & TRADEMARK OFF. SOC'Y 425 (2002); Bernarr R. Pravel, *Why the United States Should Adopt the First-to-File System for Patents*, 22 ST. MARY'S L.J. 797 (1991); Toshiko Takenaka, *Rethinking the United States First-to-Invent Principle from a Comparative Law Perspective: A Proposal to Restructure § 102 Novelty and Priority Provisions*, 39 HOUS. L. REV. 621 (2002); Andrew H. Thorson & John A. Fortkort, *Japan's Patent System: An Analysis of Patent Protection Under Japan's First-to-File System*, 77 J. PAT. & TRADEMARK OFF. SOC'Y 291 (1995); Edward C. Walterscheid, *Priority of Invention: How the United States Came to Have a "First-to-Invent" Patent System*, 23 AIPLA Q.J. 263 (1995); Blake R. Wiggs, *Canada's First-to-File Experience – Should the U.S. Make the Move?*, 73 J. PAT. & TRADEMARK OFF. SOC'Y 493 (1991); Gregory J. Wrenn, *What Should Be Our Priority – Protection for the First to File or the First to Invent?*, 72 J. PAT. & TRADEMARK OFF. SOC'Y 872 (1990); Karen M. Curesky, Note, *International Patent Harmonization Through W.I.P.O.: An Analysis of the U.S. Proposal to Adopt a "First-To-File" Patent System*, 21 LAW & POL'Y INT'L BUS. 289 (1989); Vito J. DeBari, Note, *International Harmonization of Patent Law: A Proposed Solution to the United States' First-to-File Debate*, 16 FORDHAM INT'L L.J. 687 (1992-93); Stephanie Gore, Comment, *"Eureka! But I Filed Too Late . . .": The Harm/Benefit Dichotomy of a First-to-File Patent System*, 1993 U. CHI. L. SCH. ROUNDTABLE 293 (1993); Peter A. Jackman, Essay, *Adoption of a First-to-File Patent System: A Proposal*, 26 U. BALT. L. REV. 67 (1997); Kim Taylor, Note, *Patent Harmonization Treaty Negotiations on Hold: The "First to File" Debate Continues*, 20 J. CONTEMP. L. 521 (1994); Linda R. Cohen & Jun Ishii, *Competition, Innovation and Racing for Priority at the U.S. Patent and Trademark Office* (AEI-Brookings Joint Center for Regulatory Studies, Working Paper 05-22, 2005), available at <http://www.aei-brookings.org/admin/authorpdfs/page.php?id=1215>; Dave Simon, *The First-to-File Provisions of the Patent Reform Act of 2005 Violate the Constitution's Intellectual Property Clause* (Nov. 2005), available at <http://ssrn.com/abstract=841404>.

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standards is often understood as a debate over whether there is more benefit to a society in encouraging and rewarding early disclosure of inventions versus encouraging and rewarding early invention. The practical effects of these different standards impact various aspects of the innovation reward system of a given country.

The U.S. patent system, with its first-to-invent standard and lower costs, can be considered primarily a distributed innovation reward system. An underlying goal of a purely distributed innovation system is to encourage as much innovation as possible by as many different players on the economic stage, allowing the unseen hand of free enterprise to determine which innovations prevail. From the standpoint of encouraging and enabling the capitalization of inventive activity, a distributed innovation system rewards innovation by granting technologically broad and exclusive rights and providing strong remedies for enforcement of those rights.²⁸ This combination enables and encourages participation at the grassroots level by players who do not necessarily have any significant market presence or financial resources.²⁹ A distributed innovation system is designed to reward a variety of players—universities to private enterprises, individual inventors to multinational conglomerates—whether or not they presently possess commercially viable technology.

In contrast, the European Union patent system with its first-to-file standard and higher costs³⁰ primarily exhibits characteristics of a centralized innovation reward system. An underlying goal of a purely centralized innovation system is to lower the adoption costs for new innovation by facilitating and encouraging the existing players to improve and expand their technologies in a way that encourages disclosure and cross-licensing of new and improved technologies with other commercial players.³¹ This system tends to reward technology

28. See generally ADAM B. JAFFE & JOSH LERNER, *INNOVATION AND ITS DISCONTENTS: HOW OUR BROKEN PATENT SYSTEM IS ENDANGERING INNOVATION AND PROGRESS, AND WHAT TO DO ABOUT IT* 25-55 (2004).

29. See Conley, *supra* note 27, at 785-86.

30. See Margaret A. Boulware et al., *An Overview of Intellectual Property Rights Abroad*, 16 HOUS. J. INT'L L. 441, 474-75 (1994); Samson Helfgott, *Why Must Filing in Europe Be So Costly*, 76 J. PAT. & TRADEMARK OFF. SOC'Y 787 (1994).

31. See Macedo, *supra* note 27, at 224 n.167; see also Richard T. Jackson, *A Lockean Approach to the Compulsory Patent Licensing Controversy*, 9 J. TECH. L. & POL'Y 117 (2004); Joseph A. Yosick, Note, *Compulsory Patent*

development by existing players already possessing commercially viable technologies.

IV. MOTIVATION BEHIND AND SUPPORT FOR A FIRST-TO-FILE STANDARD

The primary arguments advanced in support of choosing a first-to-file standard over a first-to-invent standard focus on the increased administrative efficiency and certainty of deciding who should be awarded a patent.³² The advantages of efficiency and certainty are touted both in terms of measuring the validity of the patent relative to the state of the prior art and in terms of deciding which applicant should be awarded the patent in the situation where there are overlapping inventions.³³ The theory behind these arguments is that increased administrative efficiency and certainty in granting patents will lead to improved patent quality and, consequently, decreased patent litigation costs for defending against patents that are either invalid or indiscernible.³⁴

A move to a first-to-file standard is also urged as a step toward the desired goal of global harmonization of patent laws.³⁵ However, while the concept of global harmonization of patent standards might be understood as an abstract goal of governmental officials, there is more than meets the eye as to why there is such a strong push for bringing U.S. standards in line with the standards of Europe and Japan. There is a long range plan of pressing for an international treaty that would create a mutual reciprocity for patents granted in any of the big three patent systems (United States, Europe, and Japan).³⁶

Licensing for Efficient Use of Inventions, 2001 U. ILL. L. REV. 1275, 1276 (citing examples of compulsory licensing in Japan, Germany, and the United Kingdom).

32. See 2 MOY, *supra* note 11, § 8:36.

33. See Tatenaka, *supra* note 27.

34. See *id.* at 654-65.

35. See Pravel, *supra* note 27, at 800-01; see also DeBari, *supra* note 27; Taylor, *supra* note 27.

36. See Michael D. Kaminski, *Patent Harmonization: International Efforts Are Gradually Unifying the World's Patent Laws*, MODERN DRUG DISCOVERY, Jan. 2001, at 36, available at <http://pubs.acs.org/subscribe/journals/mdd/v04/i01/html/patents.html>; see also U.S. Patent & Trademark Office, Action Paper on the Pursuit of Substantive Patent Law Harmonization, <http://www.uspto.gov/web/offices/com/strat21/action/gd1i01.htm> (last modified

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This plan calls for not only reciprocal treatment of patents, but also encourages other countries to accept patents granted by any of these three patent systems for enforcement in those other countries.³⁷ The long-term effect of this harmonization will be to bring the world one step closer to global laws and standards governing intellectual property rights.

Clearly a system in which patents granted by any of the big three patent offices are respected worldwide will be more beneficial to large, multinational corporations, for which expenses and uncertainty associated with patent rights are of more concern. In general, larger corporations and business groups are in support of harmonizing patent laws by adopting a first-to-file patent system.³⁸ For the individual inventor and small business that may be less likely to commercialize an invention outside of the United States, however, the value of such potential global patent protection is probably less important, and, consequently, smaller inventors and universities will tend to contest the proposed legislation.³⁹

While various interest groups have taken sides in the debate surrounding the proposed legislation,⁴⁰ the ultimate impact of a change to a first-to-file standard on individual and small businesses versus large corporations is uncertain. On one hand, such a change will place individual inventors and small businesses at a disadvantage because they have fewer resources and less knowledge about the system to compete effectively in a first-to-file regime.⁴¹ On the other hand, just as

Nov. 23, 2003) (stating the goal of promoting harmonization and making it easier for American intellectual property holders to obtain international protection); U.S. Patent & Trademark Office, Statement of Intent on Patent Law Harmonization, Feb. 5, 2005, <http://www.uspto.gov/main/homepagenews/bak08feb2005.htm> (stating desire “to consider: (i) substantive patent law harmonization issues, notably the Trilateral ‘first package,’ as developed by the United States Patent and Trademark Office, the European Patent Office and the Japan Patent Office”).

37. See Kaminski, *supra* note 36.

38. See Donald W. Banner, *Patent Law Harmonization*, 1 U. BALT. INTELL. PROP. L.J. 9, 14-15 (1992).

39. See Letter from Ronald J. Riley, President, Professional Inventors Alliance USA, to Editor of the Washington Post (July 8, 2005), available at http://www.piausa.org/patent_reform/letters/ron_riley_07_08_2005; see also Eric Chabrow, *Fairness V. Efficiency*, INFORMATION WEEK, Feb. 21, 2006, available at <http://www.informationweek.com/showArticle.jhtml?articleID=180205517>.

40. See Taylor, *supra* note 27, at 522 n.7.

41. See Conley, *supra* 27, at 785-87; James E. White, *The U.S. First-to-Invent System, the Mossinghoff Conclusion, . . . and Statistics*, 85 J. PAT. &

in the rest of the business world, individual inventors and small businesses are more nimble and may benefit from the advantage of less bureaucracy in deciding more quickly than large organizations whether to file patent applications and on which patent applications to focus their resources.⁴²

V. ARGUMENTS AGAINST THE FIRST-TO-FILE STANDARD FOR THE UNITED STATES

A. FIRST-TO-INVENT ENCOURAGES GREATER PATENT QUALITY

Contrary to the arguments advanced for adopting a first-to-file standard in the United States as a way to improve patent quality, there are more compelling arguments for why a first-to-file standard in the United States would actually decrease patent quality in the long term.

With respect to quality as measured by the validity and the clarity of the claims that define an invention in a patent application, it is easy to understand how permitting a longer period of time to pass from the date of an invention to the date of filing a corresponding patent application under a first-to-invent system will enable a greater opportunity for applicants to submit more complete disclosures and better claims. Whether patent applicants take advantage of the opportunity afforded by this greater period of time in which to prepare a better patent application is a question that more often turns on the economics of the costs of preparing a patent application as much as on the amount of time available for such preparation. Similarly, additional time to draft the claims in a patent application facilitates the ability to gather information from prior art or the marketplace to better understand the scope to which the inventor is entitled, thereby avoiding the need to use a shotgun approach to drafting claims.⁴³ Additional time to file

TRADEMARK OFF. SOC'Y 357, 362-64 (2003). While the overall costs of utilizing a harmonized innovation reward system may be less on a global level, adopting a first-to-file regime in the United States is likely to drive up the costs of early-stage technology development by forcing more money and resources to be expended earlier in the development process to prepare and file patent applications before actually reducing the inventions to practice and determining their usefulness or commercial viability.

42. See, e.g., Steve Seidenberg, *A Sea Change in Patent Law*, ABA J., Jan. 2006, at 51-52.

43. Without such information, patent attorneys are more likely to draft

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the patent application also permits applicants to assess the economic value of their invention before proceeding with pursuit of patent protection and incurring the associated filing and legal fees. Applicants are therefore afforded an opportunity to self-screen their inventions for usefulness.

In contrast, the objective of a first-to-file patent system is, in effect, to reward early filing and punish late filing. Therefore, there is an inherent disincentive to prepare a careful and thoughtful patent application in which the prior art is well-searched and the claims of the invention are initially drafted to overcome the prior art. Instead, the first-to-file system rewards quick and short filings that disclose, for example, the details of one aspect of an invention, but undertake no evaluation of which features or benefits of the invention distinguish it over the prior art.⁴⁴ As a result, the disclosures tend to exhibit less quality in terms of the teaching of the invention and the validity and clarity of the claims. The claims are more likely to be overly broad so as to read on prior art, or fail to provide adequate notice to the public of their scope. In this way, a first-to-file patent system inherently results in more patent applications having lower quality on average than a first-to-invent patent system.⁴⁵ Likewise, the first-to-file regime takes away the abovementioned self-screening opportunity. Applicants in a first-to-file system who discover after filing that their patent protection may not be worth pursuing will have already incurred substantial costs, and may decide to continue to prosecute the application in hopes that it might somehow slip through an already overburdened patent office.

The European and Japanese patent offices are often held up as having higher quality patent examinations than the U.S. patent office; however, the reasons for this apparent higher quality in terms of patent validity are largely unrelated to the first-to-file patent system. The European and Japanese patent systems do not have the same kinds of problems with patent validity as the U.S. patent office in large part because of the

overly broad claims in order to avoid surrendering patentable subject matter, as subject matter disclosed but not claimed is dedicated to the public. See *Johnson & Johnston Assocs., Inc. v. R.E. Serv. Co., Inc.*, 285 F.3d 1046, 1054 (Fed. Cir. 2002).

44. See Conley, *supra* note 27, at 788.

45. See Donald S. Chisum, Introduction, *The Harmonization of International Patent Law*, 26 J. MARSHALL L. REV. 437, 448 (1993); Taylor, *supra* note 27, at 535.

significant delay in prosecuting patent applications in both systems—on average three to five years for the European Patent Office⁴⁶ and five to six years for the Japanese Patent Office,⁴⁷ where a request for examination does not even have to be made until three years after the priority date of a patent application.⁴⁸ These delays, coupled with the annuity fees that must be paid each year an application is pending and, in the case of the European Patent Office, significantly higher filing fees,⁴⁹ serve as a self-screening process in which many patent applications are either never filed or never examined because of the expense of the process.⁵⁰ The delays can further function to improve the quality of patent examinations by providing time for the settling out of prior art. In technology sectors where multiple players are actively publishing, marketing, or otherwise disclosing their technology, prior art sources can become available during the additional time between the patent filing date and examination.

Patent “quality” is a broad, multi-faceted concept most often discussed in the abstract without any specific context that would permit quantifiable measurement. Some of the different aspects of patent quality that are entangled under the general rubric of concerns about patent “quality” can be separated into: (1) the validity of the issued claims (the “validity facet”), (2) the discernability of the claim scope (the “notice facet”), (3) the effectiveness of the patent at teaching the invention to society

46. See EUROPEAN PATENT OFFICE, HOW TO GET A EUROPEAN PATENT: GUIDE FOR APPLICANTS PART ONE 9 (10th ed. 2004), available at http://www.european-patent-office.org/legal/guiapp1/pdf/g1en_net.pdf.

47. See European Patent Office, Patent Information: Frequently Asked Questions About Japan, http://patentinfo.european-patent-office.org/prod_serv/far_east/faq/japan/index.en.php#4 (last visited Mar. 23, 2006).

48. See *id.*

49. See Boulware et al., *supra* note 30; Helfgott, *supra* note 30.

50. See generally John Doll, Commissioner for Patents, Presentation at the USPTO Town Hall Meeting (Feb. 1, 2006), available at <http://www.uspto.gov/web/offices/pac/dapp/opla/presentation/focuspp.html> (stating that in response to USPTO rule changes that would drive up the costs of prosecuting a patent application, patent applicants are expected to more rigorously self-screen prior to filing for patent). Self-screening of this type is perhaps the most effective way of culling out the large number of high visibility “vanity” patents (for example, the side-to-side swinging patent, U.S. Patent No. 6,368,227 (filed Nov. 17, 2000)) that are typically presented as the poster-children for those attacking the quality of patents granted by the USPTO.

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(the “teaching facet”), and (4) the value, or usefulness, of the patented invention itself (the “value facet”). Only by identifying a given facet can there be any meaningful discussion of a quantifiable measurement of that aspect of patent quality.⁵¹ Regardless of which facet of patent quality is considered, there is little evidence to support the theory that a first-to-file system would improve patent quality.

B. FIRST-TO-FILE AND ADMINISTRATIVE EFFICIENCY

The patent laws of the European Union and Japan implement an absolute novelty rule under which no grace period is provided to applicants.⁵² As such, the inventor’s own public activities prior to filing can prevent patentability. This test, combined with the first-to-file regime, truly simplifies assessing the relevant dates for determining patentability as against prior art references and other prospective patentees. All potentially invalidating events are compared against the filing date.

The change to a first-to-file system proposed in the Patent Reform Act of 2005 would not achieve the administrative efficiency with respect to ascertaining the inventors’ rights of priority presently enjoyed by the European and Japanese patent offices. The proposed legislation retained the one-year grace period that permits the inventor to file up to one year after publication or commercialization activity.⁵³ Fact discovery would still be needed for establishing the dates of pre-filing activity by the inventor. Indeed, first-to-invent factual inquiries may well remain a part of U.S. patent law under the proposed legislation. Thus, the detrimental effects associated with the upheaval of the current law by the proposed legislation are not tempered by any benefit of long-term improvement in administrative efficiency in assessing relevant dates of activity affecting patentability.

Another difference between the proposed first-to-file system for the United States and the first-to-file systems in

51. Various approaches have been proposed for quantifying or rating the value of a patent. *See, e.g.*, R. Polk Wagner, *The Patent Quality Index*, Presentation at the University of Pennsylvania Law School (January 2006), available *at* http://www.law.upenn.edu/blogs/polk/pqi/documents/2006_1_presentation.pdf.

52. *See* Convention on the Grant of European Patents, art. 54(2), Oct. 5, 1973, 1065 U.N.T.S. 222; Japanese Patent Law, Law No.121 of 1959, § 29(1).

53. *See* Patent Reform Act of 2005, H.R. 2795, 109th Cong. § 3(b) (2005).

Japan and Europe is the availability of a provisional patent application in the United States.⁵⁴ It is expected that a common procedure that would be used under the proposed first-to-file system in the United States would be to quickly file an initial disclosure (for example, the original invention disclosure form from the inventor) as an initial provisional patent application, and then follow it with a series of follow-on provisional applications as further information about the invention (such as engineering drawings, specifications, and test results) develops. A regular utility application would then be prepared prior to the one-year anniversary of the original provisional application or just prior to the public disclosure of the invention.

While such a string of running provisional applications may seem like a reasonable way to deal with a first-to-file system, the likely outcome will be not only increased costs for preparing and filing multiple applications for the same invention, but also increased costs to prosecute the cases, especially in situations with two different lines of applications by different inventors pursuing a similar invention. In these situations, the USPTO will be forced to evaluate each string of priority applications to determine which inventor was first to make a filing that supported the claimed invention, a process that would be known as an “inventor’s rights contest.”⁵⁵ As a result, the arguments advanced for the administrative efficiencies achieved by adopting a first-to-file system in the United States are not likely to be realized. Without these administrative efficiencies, the more likely outcome will be an overall decrease in patent quality and an increase in patent application pendency for a larger percentage of those cases which involve two or more parties contesting patent rights related to the same or similar subject matter.

C. INTERFERENCES ARE NOT LESS EFFICIENT THAN INVENTORS’ RIGHTS CONTESTS

Some of the arguments advanced for adopting a first-to-file

54. See 35 U.S.C. § 111(b) (2000) (“A provisional application for patent shall be made or authorized to be made by the inventor, except as otherwise provided in this title.”).

55. See H.R. 2795 § 3(i).

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system have targeted the current interference process.⁵⁶ Implicit in the Patent Reform Act of 2005 is the assumption that the “inventor’s rights contest” process proposed in the bill will be simpler and more efficient than the current interference process of determining who was the first to invent a claimed invention. These arguments have focused on the decrease in patent quality and increase in patent expenses and patent application pendency that have historically been associated with the long and tortuous process of using the interference procedures to resolve disputes over who was the true first inventor of an invention. For many reasons, the proposed inventor’s rights contest is more likely to be a step backward, rather than forward, in making the process of determining who should be awarded a patent more efficient and predictable.

While historically interferences certainly deserved their reputation as an arcane legal quagmire,⁵⁷ recent changes have significantly streamlined the interference process to make the process more efficient and certain.⁵⁸ More importantly, the interference process is invoked only in those relatively few cases where an issued patent and a pending patent application have claims that are overlapping and the party with the later filing date has evidence suggesting that they had invented the claimed invention before the party with the earlier filing date. In reality, interferences are declared for only about 100 of the more than 376,000 patent applications filed each year.⁵⁹ In

56. See, e.g., *Hearing on Committee Print Regarding Patent Quality Improvement Before the Subcomm. on Courts, the Internet and Intellectual Property*, 109th Cong. (April 20, 2005) (statement of Jeffrey P. Kushan on behalf of Genentech, Inc.), available at [http://www.promotetheprogress.com/ptpfiles/patentreform/houseoversight/042005/prepared/kushan\(dna\).pdf](http://www.promotetheprogress.com/ptpfiles/patentreform/houseoversight/042005/prepared/kushan(dna).pdf); COMMITTEE ON INTELLECTUAL PROPERTY RIGHTS IN THE KNOWLEDGE-BASED ECONOMY, NAT’L RESEARCH COUNCIL, *A PATENT SYSTEM FOR THE 21ST CENTURY* 107, 126 (Stephen A. Merrill et al. eds., 2004), available at <http://www.nap.edu/html/patentsystem>.

57. See, e.g., *Cooper v. Goldfarb*, 154 F.3d 1321, 1326 (Fed. Cir. 1998) (referring to extensive interference proceedings lasting over twelve years).

58. See Bruce H. Stoner, Jr., Official Gazette Notice, *Interference Practice – New Procedures for Handling Interference Cases at the Board of Patent Appeals and Interferences* (Nov. 6, 1998), available at <http://www.uspto.gov/web/offices/com/sol/og/1998/week48/patapp2.htm>; see also Rules of Practice Before the Board of Patent Appeals and Interferences, 37 C.F.R. §§ 41.200-41.208 (2005).

59. See U.S. PATENT & TRADEMARK OFFICE, BOARD OF PATENT APPEALS AND INTERFERENCES PROCESS PRODUCTION REPORT (2004), available at <http://www.uspto.gov/web/offices/dcom/bpai/docs/process/fy2004.htm> (reporting that eighty-six *inter partes* cases were declared by the Board of Patent Appeals

these rare situations, the parties would have to undertake discovery to resolve which inventor had the best-documented dates of conception and reduction to practice of the claimed invention. For more than 99.9% of patent applicants, there is no need to resort to this kind of procedure to establish whether the applicant should be entitled to a patent.

Under the proposed inventor's rights contest process, it is very likely that an equivalent determination to an interference will be necessary for overlapping rights, but this will happen more often, not less often, than interferences for two reasons. First, the strategy of filing strings of running provisional applications is likely to become more popular and therefore the potential for "documented" overlap will increase, not decrease. Second, the incentives that create the rush to get provisional patent applications on file will increase the likelihood that there are legitimate disputes over which provisional application actually first legitimately enabled a given claimed invention by providing a sufficient description of the claimed invention. Instead of affording inventors and their attorneys time to prepare careful and thoughtful patent applications—as is encouraged by the first-to-invent system—the first-to-file system encourages and rewards hasty and piecemeal filings for the sake of preserving a filing date.

The proposed first-to-file system will place the burden on each and every applicant to create multiple, prompt patent application filings in order to be in the best position to defend their rights to a claimed invention. As such, all applicants will now bear the increased costs of defending their rights by making early filings. In contrast, the current first-to-invent system allows inventors to either file quickly or to rely on internal documentation of an invention and development process to preserve their rights to a claimed invention. Only in those very few situations where there are actual interferences under the current law is it necessary for patent applicants and owners to bear the costs of defending their rights to inventions for which they believe they were the earlier inventors.

and Interferences in fiscal year 2004); U.S. PATENT & TRADEMARK OFFICE, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2004, tbl.2 (2004), available *at* http://www.uspto.gov/web/offices/com/annual/2004/060402_table2.html (listing 376,810 patent applications filed in fiscal year 2004).

VI. BETTER IDEAS FOR IMPROVING PATENT QUALITY

Even though the first-to-invent system may seem like a quaint anachronism whose time has passed, in reality, under the distributed innovation reward system in the United States, the first-to-invent standard provides for a more efficient and higher quality patent system than a first-to-file system. By giving inventors and attorneys more time to prepare patent applications, the quality of the patent applications should be better than would be the case under a first-to-file system. If improving patent quality is the true objective, full funding of the USPTO, increased filing fees, and deferred examinations are much better solutions with proven track records in both Europe and Japan. While the recent proposed USPTO rule changes are certain to be the subject of much discussion and objection by the patent bar,⁶⁰ these proposed rule changes are good examples of ways in which improvements to efficiency of patent prosecution can be achieved without resorting to a first-to-file system.

Certainly there is room for improving our first-to-invent system to remove disadvantages for international inventors and to make the standards clearer on what constitutes prior art. There is also merit in enacting more well-defined standards for the obviousness of an invention and even adopting the equivalent of claiming standard or style sheets⁶¹

60. See *e.g.*, Changes to Practice for Continuing Applications, Requests for Continued Examination Practice, and Applications Containing Patentably Indistinct Claims, 71 Fed. Reg. 48 (proposed Jan. 3, 2006) (to be codified at 37 C.F.R. pt. 1); Changes to Practice for the Examination of Claims in Patent Applications, 71 Fed. Reg. 61 (proposed Jan. 3, 2006) (to be codified at 37 C.F.R. pt. 1). Both proposed rule changes attempt to impose certain limitations on prosecution of patent applications, both in terms of the number of claims submitted in a given application and in terms of the number of continuing applications that would be permitted for any given family of patent applications. The proposed rule change in 71 Fed. Reg. 48, limiting the number of continuing applications to one as a matter of right without obtaining permission of the Commissioner, will clearly cut down on the number of continuing applications. The proposed rule change in 71 Fed. Reg. 61, requiring submission of an onerous examination support document for any applications having more than ten independent or dependent claims designated for initial examination, will certainly serve as a deterrent to applications with large numbers of claims. Whether either of these proposed rule changes will ultimately be adopted is an open question, especially in the case of the limitation on the number of continuing applications, which appears to be in tension with both existing case law precedent and statutory authority. See, *e.g.*, 35 U.S.C §§ 119-120 (2000); *In re Henriksen*, 399 F.2d 253 (1968).

61. The argument that inventors and patent attorneys need an unfettered

as other ways to improve the quality of patents issued by the USPTO. The recent report by the Government Accountability Office on patent quality and the USPTO provides ample ground for making incremental changes to the patent laws and USPTO without the need to abandon our first-to-invent patent standard.⁶²

VII. CONCLUSION

In the spirit of global harmonization, the Patent Reform Act of 2005 attempted to settle the debate between the more distributed, first-to-invent standard and the more centralized, first-to-file standard by choosing the first-to-file standard as the “better” regime. However, in the context of worldwide innovation, the optimum theoretical and practical answer to the question of which standard is better for global innovation reward systems may well be “both.” Having a single approach to rewarding innovation will necessarily channel innovation into those models that are best suited for that approach. Because innovation is, by definition, a process of creating something that is not presently known, it is antithetical to presume that we can know with any certainty the single best system to encourage innovation.

Even though there may be some level of increased costs associated with using different standards for patentability in different countries across the world, both individuals and companies with any significant business presence outside the United States have learned how to effectively use a worldwide patent system with different standards in different countries. Because of the higher costs of obtaining protection outside the United States and because of the differences in potential market size and the adoption of different innovations, companies and inventors tend to self-select which innovations

license in deciding how to craft claims defining an invention is simply an unsupportable fiction. The overwhelming majority of inventions today are improvements of and refinements to existing technologies made in fields where terminology and claim styles can be standardized without any significant sacrifice to the ability of inventors and patent attorneys to define inventions.

62. GOV'T ACCOUNTABILITY OFFICE, INTELLECTUAL PROPERTY: KEY PROCESSES FOR MANAGING PATENT AUTOMATION STRATEGY NEED STRENGTHENING (2005), *available at* <http://www.gao.gov/new.items/d05336.pdf>.

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should be pursued in which countries based on the particular marketing and competitive pressures unique to that company or inventor.

In industries where the bulk of the marketplace is in the United States, international patent protection is generally relegated to the backseat in terms of any kind of enforcement or licensing of patents. Harmonizing patent standards will tend to reduce the beneficial effects of this kind of country-by-country self-selection process for patent protection and actually encourage economic inefficiency by making it easier for patents to be mechanically propagated throughout the world without a well-defined business objective for each jurisdiction.⁶³ While reformers may argue for the benefits of global harmonization of patent standards, the reality is that the world is better served by having different approaches to rewarding innovation in different countries.

There is good counsel in the old adage "Haste makes waste." Those considering the first-to-file provisions proposed in the Patent Reform Act of 2005 should heed this advice as they decide whether to make the most significant change to the U.S. patent laws in the history of our country. The rush to file that will result from a first-to-file patent system is a haste that will mean more waste for the U.S. inventor and the U.S. economy, all for the sake of a supposedly easier patent system for multinational corporations in the global economy.

The U.S. patent system has led the way for the last two centuries in encouraging not only innovation, but also investment in entrepreneurship and new technologies. With more than two-thirds of the capitalized value of publicly traded companies now representing intangible intellectual property assets, it is critically important to carefully consider whether we should fall in line with Europe and Japan for a first-to-file patent system, or whether, perhaps, we should be willing to accept the long-term inefficiencies inherent in maintaining different systems throughout the world for rewarding innovation in favor of maintaining our distributed innovation system.

63. Examples of this economic inefficiency resulting from mechanically pursuing patent protection in countries where there is no appreciable marketplace for the patented technology include the cost borne by the patentee of procuring these needless patents, and the social costs endured by countries associated with the patent rights (such as encumbrance on development of derivative technologies by third parties).