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Patent Prior User Rights: What's the Fuss?

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I. INTRODUCTION

When President Barack Obama signed into law the America Invents Act (“AIA”), the most extensive American patent law reform in almost sixty years, most commentary focused on the historic shift from a first-to-invent to a first-to-file patent system. Another change, however, also seemingly represents a historic shift: the expansion of prior user rights to all patents. Prior to the America Invents Act, this defense was limited to business method patents,¹ but under the new statute, the prior use defense may be asserted against any patent.² The prior use defense allows a party who commercially used a patented invention for at least one year prior to the patent’s filing to continue using that invention without infringing the patent.³ In practice, this means that if a party decides to keep its invention secret

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1. 35 USC § 273 (2006) (amended 2011).

2. Leahy–Smith America Invents Act (AIA) § 5, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified at 35 USC § 273).

3. AIA § 5, 35 U.S.C. § 273 (Supp. 2011).

and puts the invention to commercial use rather than disclosing it to the patent office, the otherwise infringing party may circumvent the patentee's rights. Essentially, one party's state-protected trade secret can trump another party's federally granted patent.

While many summaries of the AIA simply noted the expansion of the prior use defense without commentary, some practitioners and commentators cried foul.⁴ In the United States, inventors have traditionally had two options. First, they could disclose their invention in exchange for the patent's monopoly for a limited time. Alternatively, they could keep the invention undisclosed as a trade secret for a potentially unlimited period under state law, but accept the risk that the secret might be exposed or that another inventor might receive a patent and the monopoly.⁵ Many patent lawyers and scholars have argued that the AIA's expansion of prior user rights upsets this balance: if a party is potentially insulated from patent infringement because of its decision not to disclose the invention, does this not provide an incentive *against* disclosure?

Though some of these legal concerns have merit, I do not think that in most cases the prior use defense will incentivize parties to keep their inventions secret as a matter of business policy or planning. First, the prior use defense in the statute is a narrow one. It applies only to the subject matter as actually commercially used by the defendant and the defendant cannot modify the invention to practice patented subject matter not originally used by the defendant.⁶ Second, the defense is unusable against university patents.⁷ Potential prior users in areas with considerable university research cannot rely on protecting themselves against patents through the prior use defense. Third, parties must be able to keep the invention secret.⁸ While many

4. See, e.g., *Prior User Rights (Sec. 5), Prior User Rights / Patent Reform Issues / Help Us Save Our Patent System*, PROFESSIONAL INVENTORS ALLIANCE, http://www.piausa.org/patent_reform_issues/prior_user_rights/ (last accessed Feb. 21, 2013) ("The measure would weaken patent protection by providing a defense for unscrupulous entities to claim prior use and allows full use without royalty payments to the actual inventor. PIAUSA believes that prior user rights creates a fertile new defense for willful infringement which will lead to much more litigation."); Gene Quinn, *Patent Reform: Expanding Prior User Rights Is a Bad Idea*, IPWATCHDOG (Mar. 28, 2011, 9:23 PM), <http://www.ipwatchdog.com/2011/03/28/patent-reform-expanded-prior-users-rights-is-a-bad-idea/> ("Extending prior user rights . . . will harm innovators who seek to share their knowledge and discoveries and reward those who choose to stay quite [sic], keep innovation secret and who don't contribute to the repository of scientific and innovative knowledge.").

5. This bifurcated system of protection passed constitutional muster in *Kewanee Oil v. Bicron Corp.*, 416 U.S. 470, 491–93 (1974), which held that the federal patent system did not preempt state trade secret and misappropriation laws.

6. § 273(e)(3).

7. § 273(e)(5).

8. § 273(a)(2)(B).

inventions, particularly processes, can be kept confidential, most simply cannot. This significantly limits the practical ability to even invoke the defense. Finally, the AIA includes strict penalties for inappropriately raising the prior use defense.⁹

These limitations will likely combine to make the prior use defense practical only in *post hoc* cases, where the defendant clearly used the invention for a considerable period of time. From an *ex ante* perspective, because of these limitations, the availability of the prior use defense will not likely convince a party who would otherwise disclose an invention in a patent application to keep it secret instead.

II. A BRIEF HISTORY OF PRIOR USER RIGHTS IN THE UNITED STATES

The concept of prior user rights originated in countries with first-to-file patent systems.¹⁰ Within the first-to-file context, prior user rights allow parties a limited defense if they can show their use of the invention prior to another's filing. This provides parties who put the invention to use but delayed filing (for whatever reason) a limited form of relief; while they do not obtain the full monopoly rights of the patent, they are protected from having to alter their course of business because someone else did. Prior user rights are well established in the laws of Australia, Brazil, Canada, China, Denmark, France, Germany, Japan, South Korea, Mexico, Russia, and the United Kingdom.¹¹

Prior user rights were less appropriate in the United States' traditional first-to-invent system and were introduced in a limited fashion only recently. One reason for this is that the United States has long had a bifurcated system of federal and state protection for innovation.¹² Inventors may choose to protect their invention either through the federal patent system or through state trade secret laws. In the patent system, inventors receive an exclusive monopoly of limited time to exploit their inventions. In exchange, the inventor must disclose the invention and enable others to make or perform it in order to promote innovation and progress.¹³ In contrast, under state

9. § 273(f).

10. See Lisa M. Brownlee, *Trade Secret Use of Patentable Inventions, Prior User Rights and Patent Law Harmonization: An Analysis and Proposal*, 72 J. Pat. & Trademark Off. Soc'y 523, 526 (1990) (noting that a 1987 WIPO study found that twenty-eight out of forty-five countries with a first-to-file system also provided at least some prior user rights).

11. See U.S. PATENT & TRADEMARK OFFICE, REPORT ON THE PRIOR USER RIGHTS DEFENSE app. D (2012) (listing and comparing the prior user rights provisions of these countries).

12. *Kewanee Oil v. Bicron Corp.*, 416 U.S. 470, 491–93 (1974).

13. This basic *quid pro quo* of “limited monopoly in exchange for disclosure” has long served as a rationale for the existence of U.S. patent law. See, e.g., *Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 19 (1829) (“If an inventor should be permitted to hold back from the knowledge of the

trade secret law, inventors can choose to protect their invention as confidential for a potentially unlimited time.¹⁴

However, choosing to protect via trade secret law also carried a risk that another party could independently develop the invention and be awarded a patent for the subject matter, thereby excluding the secret user. Under the first-to-invent system, although the secret user could attempt to show prior invention to obtain the patent or block another applicant, this often proved troublesome. A secret prior use meant the invention had been kept confidential rather than publicly disclosed. Failure to disclose the invention meant the invention was not prior art under section 102(b) of the 1952 Patent Act, which requires public use or sale.¹⁵ Because it was not disclosed, no record would exist for the U.S. Patent and Trademark Office (“USPTO”) to cite as prior art under section 102(a). Further, the acts taken to maintain confidentiality could demonstrate concealment, such that the prior invention did not qualify as prior art under section 102(g) either.¹⁶ Without qualifying as prior art, the secret user’s invention would not anticipate the later-filed patent application, resulting in the secret prior user’s complete loss of use of the subject matter. Further, protecting important inventions by trade secret is also notoriously difficult. One unsigned confidentiality statement or one tour group in the wrong area of a factory could potentially undermine a company’s attempts to secure trade secret protection for its confidential inventions. Nonetheless, since the Supreme Court’s *Kewanee Oil* decision in 1974, inventors have relied on the stability of this bifurcated system of protection to decide whether to disclose inventions and seek patents or keep them confidential as trade secrets.

In the first-to-invent context of the United States, the issue of prior user rights remained relatively unimportant until 1998. In that year, the Federal Circuit overturned long-standing judicial precedent

public the secrets of his invention; if he should for a long period of years retain the monopoly, and make, and sell the invention publicly, and thus gather the whole profits of it, . . . and then . . . he should be allowed to take out a patent, . . . it would materially retard the progress of science and the useful arts and give a premium to those who should be least prompt to communicate their discoveries.”).

14. A trade secret can be protected, and its misappropriation legally acted upon, for as long as the information is kept secret by the protecting party. RESTATEMENT (THIRD) ON UNFAIR COMPETITION § 39 cmt. f (1995).

15. 35 U.S.C. § 102(b) (2006). “Prior art” refers to publications, uses, disclosures, or sales prior to the filing of that patent that could be used to render the claimed subject matter anticipated or obvious, and therefore not patentable.

16. § 102(g) (removing from the prior art prior inventions that have been “abandoned, expressed, or concealed”).

in *State Street Bank and Trust Co. v. Signature Financial Group*, holding that “methods of doing business” were indeed patentable subject matter under section 101 of the 1952 Patent Act.¹⁷ By allowing business methods to be patented, *State Street Bank* created problems for companies who, relying on years of judicial precedent, had kept their business processes and methods secret rather than disclosing them and seeking patent protection.¹⁸ Congress responded by enacting a “first inventor defense” as Title II of the American Inventors Protection Act of 1999 (AIPA).¹⁹ This provision provided prior users of business methods a defense against infringement if they could show by clear and convincing evidence that they had actually reduced the subject matter of the invention to practice at least one year before the effective filing date of the patent and commercially used the invention before the filing date.²⁰ Moreover, Congress explicitly limited the prior use defense to “method[s] of doing or conducting business.”²¹

Though Congress did not precisely define such methods, it is clear from the timing of the AIPA’s passage and the legislative history that Congress was relying on the judicially-created definition of “business method” patents. In the legislative history, Congress explicitly linked the creation of this limited first inventor defense to the *State Street Bank* decision, noting that “[i]n the past, many businesses that developed and used such processes thought secrecy was the only protection available.”²² These inventors’ reliance on state trade secret protection resulted from a reasonable reliance on the state of the law as it then existed rather than a conscious preference for trade secret protection over patent protection. Therefore, as Donald Chisum notes in his authoritative treatise on patent law, “Congress’ intent in restricting the ‘first inventor’ defense to business methods was to give special consideration to those using business methods as trade secrets and to withhold such consideration from users of other,

17. 149 F.3d 1368, 1375 (Fed. Cir. 1998).

18. See H.R. REP. NO. 106-287, pt. 1, at 45 (1999) (“Thousands of ‘back office’ processes are now being patented. In the past, many businesses that developed and used such processes thought secrecy was the only protection available. Under established law, these pre-existing processes do not now qualify for patent protection because they have been in commercial use.”).

19. H.R. 1907, 106th Cong. tit. II (1999). This bill was enacted in a rather roundabout way. After being passed by the House, the bill never went to the Senate floor, but was added in its entirety as title IV of the Intellectual Property and Communications Omnibus Reform Act of 1999. S. 1948, 106th Cong. (1999). This entire bill was enacted into law as a single line in the Consolidated Appropriations Act, 2000, Pub. L. 106-113, Div. B, sec. 1000(a), 113 Stat. 1501 (1999).

20. 35 U.S.C. § 273(b) (2006) (amended 2011).

21. § 273(a) (2006) (amended 2011).

22. H.R. REP. NO. 106-287, pt. 1, at 45 (1999).

more traditional technologies.”²³ In this sense, the original American foray into prior user rights was less a matter of patent jurisprudence principles and more a pragmatic response to uncertainties created by new judicial interpretations of long-standing patent law.

In 2011, Congress enacted the AIA and the United States changed from a first-to-invent system to a first-to-file system. Among other reforms adopted for transitioning the patent system to first-to-file, the AIA also expanded the prior use defense to all patents.²⁴ As amended, section 273 now applies to “subject matter consisting of a process, or consisting of a machine, manufacture, or composition of matter used in manufacturing or other commercial process”²⁵ The prior user must have “commercially used the subject matter . . . either in connection with an internal commercial use or an actual arm’s length sale or other arm’s length commercial transfer of a useful end result,” and the commercial use must have occurred at least one year before the effective date of the claimed patent application or before public disclosure of the claimed invention.²⁶ While the prior user may increase the volume of production of the matter to which the prior user right extends, the right “is not a general license under all claims of the patent at issue, but extends only to the specific subject matter for which it has been established that a commercial use that qualifies . . . occurred.”²⁷

Unfortunately, the legislative history does not provide much explanation for the expansion. Rep. Lamar Smith added section 5 of the AIA, which enacted the expanded defense, as part of his manager’s amendment on June 20, 2011 without debate.²⁸ Smith’s amendment introduced the prior user right from an earlier draft of the bill with only minor changes. Some debate on the earlier provision had occurred in the Senate, principally between Senators Blunt, Kyl, and Leahy.²⁹ However, the only general statement of Congressional purpose with respect to the prior use defense lies in the House report on the bill. The report states that other countries with first-to-file systems have statutory prior use defenses of varying scope and degree

23. 5 DONALD S. CHISUM, CHISUM ON PATENTS § 16.03[4] (2011).

24. § 273(a).

25. *Id.*

26. *Id.*

27. § 273(e)(3).

28. See Manager’s Amendment, at 2–8, available at http://judiciary.house.gov/issues/issues_patentreformact2011.html (last accessed Feb. 21, 2012).

29. For a full discussion of the congressional debate and the individual views of Senators Blunt, Kyl, and Leahy, see Joe Matal, *A Guide to the Legislative History of the American Invents Act: Part II of II*, 21 Fed. Cir. B.J. 539, 560–81 (2012).

and that “high-tech businesses [may] prefer not to patent every process or method that is part of their commercial operations.”³⁰ While this explanation gives a nod to the international harmonization of American patent law, its reference to high-tech processes and methods certainly does not explain why Congress chose to expand the defense to all patents rather than limiting it to those mentioned. The legislative history also fails to address any possible concerns regarding the uniquely American system of federal patent and state trade secret protection.

Although Congress expanded the prior use defense to all patents, in many other ways it narrowed the availability and scope of the defense compared to the previous version for business methods only. First, the prior user must not only actually reduce the subject matter to practice but must also commercially use or sell the invention at least one year prior to the effective filing date of the invention.³¹ The AIA also clarifies that the prior use defense is a personal defense that may be asserted only by the person performing (or directing the performance of) the commercial use and the defense can only be transferred as ancillary to a good-faith assignment of the entire line of business.³² Even when a prior use right is successfully asserted, the ongoing use is restricted to the sites where the use was occurring at the time of the effective filing date for the invention or the date of transfer.³³ Also, the defense is limited to the subject matter actually commercially used, not the entire scope of the patent, although the prior user may vary the quantity or volume of use and make improvements not specifically claimed by the patent.³⁴ Finally, one major exception is that the prior use defense may not be asserted against patents which, at the time the invention was made, were owned or subject to assignment to a university.³⁵ Finally, the AIA maintained the AIPA’s provisions requiring that the prior use be shown by clear and convincing evidence and that an unreasonable assertion of the defense would result in the awarding of attorney’s fees to the plaintiff.³⁶

30. H.R. REP. 112-98, at 44 (2011).

31. § 273(a).

32. § 273(e)(1).

33. *Id.*

34. § 273(e)(3).

35. § 273(e)(5).

36. § 273(b), (f).

III. THE DEBATE OVER PRIOR USER RIGHTS

Although Congress left its purpose for expanding prior user rights somewhat murky, the legal and policy debate over the defense began long before the AIA was enacted and has continued since. Supporters argue that prior user rights level the playing field for American inventors against foreign inventors, protect the investment to commercialize technology even if it is not publicly disclosed, and justly and equitably resolve the question of whether to invalidate an otherwise good patent over secret prior art or enjoin a commercial use begun prior to the patent's filing. In response, opponents argue that prior user rights unconstitutionally invade the patent owner's exclusive right, weaken the value of both the individual patent and the patent system as a whole, and favor large corporations at the expense of individual inventors and start-ups.

A. The Argument for Prior User Rights

First, supporters of prior user rights contend that such rights help equalize opportunities for American inventors with those of their foreign counterparts. As noted above, Japan, China, and many European countries have included prior user rights of varying scope in their patent laws.³⁷ Historically, foreign patents held by U.S. owners were limited by prior user rights, whereas foreign inventors seeking U.S. patents were not limited by American prior users. This, they argue, put American inventors and owners at a disadvantage.³⁸

Second, prior user rights protect a prior user's investment in commercializing secret technology. In some cases, the public does not need to receive the disclosure of the technology to benefit from it.³⁹ Should a party who has provided a public benefit prior to another party's patent filing for the same invention, proponents ask, be later barred from practicing that invention? This seems unfair to both the prior user, who may have invested a substantial sum in the

37. See *supra* notes 10–11 and accompanying text.

38. Gary L. Griswold et al., Letter to the Editor, *Prior User Rights: Neither a Rose nor a Thorn*, 2 U. BALT. INTELL. PROP. L.J. 233, 235 (1994); David H. Hollander, Jr., *The First Inventor Defense: A Limited Prior User Right Finds Its Way into US Patent Law*, 30 AIPLA Q.J. 37, 57 (2002).

39. As a simple example, many engineered materials and chemicals, such as adhesives, are considered proprietary by their manufacturer. See, e.g., 3M, MATERIAL SAFETY DATA SHEET 3M VHB ARCHITECTURAL PANEL TAPE – G16F & G11F (2011), available at http://multimedia.3m.com/mws/mediawebserver?mwsId=SSSSSuUn_zu8l00xMY_B5x2UMv70k17zHvu9lxtD7SSSSSS-- (calling the acrylic adhesive composition a trade secret). The secrecy of the chemical composition of the adhesive tape does not render it any less effective to the public for its purpose.

commercialization of the technology, and the public, who may be charged a premium for the technology from the patentee.⁴⁰

Third, proponents contend that many minor improvements and technologies are simply not worth the substantial cost of seeking patent protection and enforcement. Inventors may choose instead to simply keep such minor innovations confidential when faced with other patent priorities. Prior user rights provide such inventors protection should another inventor with different patenting priorities file for the same invention later.⁴¹

B. The Argument Against Prior User Rights

Opponents to prior user rights counter the arguments of supporters by first arguing that, in the United States, prior user rights may unconstitutionally interfere with the patentee's right to exclude others.⁴² The Intellectual Property Clause of the Constitution grants Congress the power to establish a patent system "by securing for limited times to . . . inventors the exclusive right to their . . . discoveries."⁴³ Prior user rights invade that exclusivity. Although other limits on patent exclusivity exist,⁴⁴ prior user rights allow another to use the subject matter of a patent without compensating the patentee. Accordingly, prior user rights invade the precise realm where a patentee could rightfully expect his patent to be enforced. This cheapens the value of the patent and takes the patentee's exclusive right to the invention, counter to what was envisioned in the Constitution.

Even if prior user rights are constitutional, opponents contend that they are antithetical to the rationale of the federal patent

40. F. Andrew Ubel, *Who's On First? – The Trade Secret Prior User or a Subsequent Patentee?*, 76 J. PAT. & TRADEMARK OFF. SOC'Y 401, 417 (1994).

41. See Hollander, *supra* note 38, at 53–54 (discussing this point further and citing the Congressional hearings on the issue).

42. Gene Quinn, a patent attorney and the founder of the popular patent law blog IPWatchdog, is a vociferous proponent of the argument that prior user rights are unconstitutional. See Gene Quinn, *The Constitutional Argument Against Prior User Rights*, IPWATCHDOG (June 14, 2011, 4:21 PM), www.ipwatchdog.com/2011/06/14/the-constitutional-argument-against-prior-user-rights/.

43. U.S. CONST. art. I, § 8, cl. 8.

44. For example, the government has a right to use patented subject matter obtained with federal funding, 35 U.S.C. § 202(c)(3) (2006), and courts have created doctrines of patent misuse to limit a patentee's use of the patent as leverage to obtain from licensees benefits outside the scope of the patent, *Morton Salt Co. v. G.S. Suppiger Co.*, 314 U.S. 488, 492 (1942).

system.⁴⁵ The American patent system is most often justified as a quid pro quo: In exchange for disclosing the subject matter to the public, the inventor receives a monopoly on the invention for a limited time. In essence, while supporters of prior user rights identify the public benefit as the commercial use of the invention, opponents identify the public benefit of the patent as its disclosure requirements. According to these opponents, if an inventor chooses not to disclose the invention, the public does not receive the benefit, and therefore the nondisclosing inventor should not be allowed to invade the exclusive right of those who do. Accordingly, prior user rights grant an inventor some protection without a corresponding public benefit, which undermines the entire purpose of the patent system.

Opponents further contend that prior user rights will actually stifle innovation because they will normally protect large businesses against small inventors and entrepreneurs. Large businesses will be more likely to have the resources and internal protocols in place to protect confidential information and technology. Large businesses are also more likely to forego patenting minor improvements to technologies in order to prioritize funding for other inventions deemed more important to their core business. In contrast, many small businesses and entrepreneurs seek to establish their competitive advantage in these minor technologies and improvements. Obtaining patent protection for their key products or features is also much more likely to make or break such companies, which have fewer resources and fewer products to bring to market. As a result, the prior user is more likely to be a large corporation. If the large corporation is allowed to continue producing and selling material patented by the small business due to its prior user right, the value of the patent, and the likelihood of the patentee's successful entry into the market, is diminished.⁴⁶

45. Roger L. Rohrbach, *Prior User Rights: Roses or Thorns?*, 2 U. BALT. INTELL. PROP. L.J. 1, 7–8 (1993); Leslie M. Hill, Note: *Prior User Defense: The Road to Hell is Paved with Good and Bad Intentions*, 10 Fed. Cir. B.J. 513, 547 (2001).

46. See, e.g., Gene Quinn, *Trojan Horse Patent Reform, About Prior User Rights All Along*, IPWATCHDOG (May 31, 2011, 8:34 AM), <http://www.ipwatchdog.com/2011/05/31/trojan-horse-patent-reform-prior-user-rights/id=17516/> (“Prior user rights will not benefit the individual or the small business. Prior user rights unambiguously will benefit the large corporations who innovate and then shelf technology for one reason or another, or those who exploit the technology in secret. Perhaps they choose not to pursue a patent because it isn’t perceived to be a meaningful innovation, or worth the cost and time of pursuing a patent. Perhaps the innovation gets weeded out along the way, never getting green-lighted past a certain point. . . . [With prior user rights,] all those secrets that large companies hide, fail to pursue or willfully keep from the public will allow them to ignore the patent rights of those who innovate and actually disseminate that information to the public.”).

IV. THE UNCERTAIN RESULT OF RELIANCE ON PRIOR USER RIGHTS

As noted, opponents to prior user rights contend that such rights both undermine the basis for the American patent system and will stifle innovation by tilting the scale towards large businesses rather than small entities.⁴⁷ Yet, both of these arguments assume that potential patentees will make a conscious decision *ex ante* to rely in part on prior user rights when choosing trade secret protection rather than patenting their inventions. In many scenarios, however, this assumption is most likely unfounded. First, the new prior user rights provision requires the prior user to have kept the invention secret.⁴⁸ However, not all inventions (particularly products and machines) can be commercially used while being kept secret. Second, the prior use statute prohibits using the prior use defense against patents owned by universities.⁴⁹ Accordingly, inventors in fields where universities are major patent owners simply cannot rely on prior user rights for protection because the defense will not be available against certain patents. Third, prior users must have used the invention commercially at least one year prior to the effective filing date or public disclosure of the invention.⁵⁰ To make an informed decision to rely on prior user rights, the inventor should have both a good grasp of the current state of the art in the market and be reasonably sure new entrants to the market will not direct their innovation to the subject matter in question in the upcoming year. Not knowing this information could substantially impair any anticipated benefit from the prior use defense, but such information may also be difficult to acquire. Fourth, since the statute specifically excludes the possibility of a general license,⁵¹ in a rapidly developing field, reliance on prior user rights could lock the inventor into technology that quickly becomes obsolete. Lastly, the complete lack of case law exploring the contours of the defense in business method exceptions over the last fourteen years means the legal contours of the defense are uncertain. Accordingly, these limitations, exemptions, and uncertainties mean very few potential patentees will make the decision to rely on state trade secret law rather than the patent system solely because of the prior use defense. Rather, such decisions will more likely be made in

47. *See supra* Part III.B.

48. 35 U.S.C. § 273(a)(2)(B) (Supp. 2011).

49. § 273(e)(5).

50. § 273(a)(2).

51. § 273(e)(3).

conjunction with other, well-established rationales inherent in the bifurcated American system of innovation protection.

A. Concealable Subject Matter

The prior use defense can only apply against patents where concealable subject matter is commercially exploitable. This stems from the statutory provisions for determining the relevant prior art, since prior art will render a patent unavailable. Under the AIA, one segment of prior art consists of information that “was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.”⁵² The only exceptions to this prior art rule are for disclosures made or preempted by the filer himself.⁵³ Accordingly, prior art made publicly available by a third party, such as a potential prior user, would be invalidating prior art and result in the denial of the patent. Without a patent, the existence of any prior user right is moot. Thus, for a patent to issue over the prior use by a third party, it is necessary that the prior use be secret up to the time of the patentee’s patent filing.

However, in order to claim a prior user right, the prior user must also *commercially* use the patented subject matter for at least one year before the patentee made a public disclosure, either by filing an application or otherwise.⁵⁴ Many patented inventions, especially products, machines, and some compositions of matter, simply cannot be commercially exploited in secret.⁵⁵ If the subject matter of the patent is a product to be sold, such as a new and improved toaster, vacuum cleaner, or medical device, the very act of commercially offering that product for sale would be public.⁵⁶ A bona fide offer for sale constituted a public disclosure under section 102(b) of the 1952 Act and will continue to be so under section 102(a)(1) of the AIA.⁵⁷ Therefore, because of the commercial use limitation, many patentees simply need not worry about possible prior user rights interfering with

52. AIA § 3, Pub. L. No. 112-29, 125 Stat. 284 (2011) (amending 35 U.S.C. § 102).

53. *Id.*

54. AIA § 5, 35 U.S.C. § 273(a).

55. As Daniel Munson, author of the seminal article discussing the decision between patents and trade secrets, explains, “Where . . . inspection, or ‘reverse engineering,’ should be expected to reveal the nature of the invention, trade secret protection is impractical, if not literally impossible, to maintain.” Daniel C. Munson, *The Patent-Trade Secret Decision: An Industrial Perspective*, 78 J. PAT. & TRADEMARK OFF. SOC’Y 689, 692 (1996).

56. While mechanical arts are the most obvious examples, inventions in the electrical arts, such as semiconductor technology, also tend to be easily reverse engineered. *Id.* at 696–97.

57. 35 U.S.C. § 102; AIA § 3 (amending 35 U.S.C. § 102).

their patents, because the very nature of the invention demands its disclosure in order to be commercially exploited.

Even if the subject matter itself is concealable while commercially used, the nature of the use may not be. If commercial use of the invention requires large capital investments or new industrial plants for production, this will attract notice in the industry.⁵⁸ Such public notice will either result in losing the trade secret or reducing the amount of lead time ahead of competitors who may seek to patent the invention, thereby minimizing the appeal of relying on prior user rights.

Of course, many patents commercially exploited today protect processes, machines for production, compositions of matter, or business methods, all of which can be kept hidden from view in certain circumstances. A review of the public record further suggests that patents in the chemical arts are the most likely to be kept as trade secrets.⁵⁹ These inventions are often commercially exploited in secret. For these inventions, the other AIA limitations on the prior user right will make inventors unlikely to decide *ex ante* to rely on prior user rights.

B. The Prohibition Against Asserting Prior User Rights Against Universities

In addition to requiring commercial use of concealable subject matter, the AIA also prohibits asserting prior user rights against universities.⁶⁰ Essentially, section 273(e)(5) exempts university research from the prior use defense. Private inventors and research corporations in fields such as biotechnology, materials science, chemistry, and other industries where universities are active patentees would be foolhardy to rely on the prior use defense when deciding between patent or trade secret protection. Should the eventual patentee be a university, the prior user's established prior use would be worthless against a suit for infringement. Therefore, in fields where universities are active patentees, potential prior users should normally opt to apply for a patent or disclose the information to the public domain rather than attempting to commercially exploit the invention in secret.

58. Munson, *supra* note 55, at 693.

59. *Id.* at 697–99.

60. 35 U.S.C. § 273(e)(5).

C. The Information Gap

Beyond the two legal concerns discussed above, practical business concerns would also militate against an ex ante decision to rely on prior user rights. First, in order to make an informed business decision to rely on prior user rights, inventors should have a sound knowledge of the state of the art in their industries and the state of research and development among their competitors, as well as a reasonable expectation that new entrants to the field will be unable to find and disclose the inventive subject matter quickly. Knowledge of these three issues is crucial because a prior user must be able to prove knowledge and ongoing commercial use of the subject matter for at least one year before the relevant patent was filed.⁶¹ If an inventor does not know how quickly his competitors in the field might be able to get to the patent office with the invention, he would be imprudent to rely on prior user rights to protect himself.

This demands that for the inventor to reasonably rely on the prior user defense ex ante, he needs to know what others in the industry are currently using, making, or selling and then predict where those competitors will be in their research nine to eighteen months in the future. If the inventor knows of a reasonable chance that a competitor might discover and file a patent on the invention within twelve months of beginning commercial use, deciding to use prior user rights would be a risky decision. If establishing commercial use will take some time after the decision to rely on prior user rights is made, that extra lead time must also be factored in when determining how far in the future competitors may be able to create the technology.

However, in most innovative industries, internal research and development projects constitute some of the most closely held trade secrets in the business.⁶² An inventor simply may not be able to obtain the necessary information to make an informed decision on prior use reliance. And when it comes to prior user rights, an ignorant decision is a foolish one.

Furthermore, prior user rights are most likely to arise in inventions on the margins. If the invention is truly groundbreaking and a sure money-maker, the inventor will almost certainly patent it to achieve the greatest possible protection and to prevent others from patenting it. Prior user rights are therefore most likely to arise in

61. § 273(a)(1).

62. See Munson, *supra* note 55, at 699 ("The precise economic importance of trade secrets, the commercial scope and total value of such secrets, is by definition impossible to ascertain.").

cases involving minor inventions and improvements for which the company decided the expense and time to file were not worth the hassle.

However, these minor improvements are exactly the area where a newcomer to the market will attempt to carve out its share. Thus, the inventing entity must concern itself not only with the “devils it knows,” but also with the devils it does not know. Whereas a large company may decide a minor improvement is not worth the expense required for patent protection, that same improvement may be the major or sole innovation the smaller new entrant will rely upon to establish itself in the market, and it is much more likely to seek patent protection. Therefore, a party deciding *ex ante* to rely on prior user rights should have a reasonable expectation that during the time it takes to establish the necessary commercial use, new entrants will not seek a patent on the invention to establish themselves in the market. Of course certain industries, such as railroads and airlines, have high barriers to entry and are unlikely to encounter many new market entrants. But other fields, particularly cutting-edge industries such as biotechnology, technology, and computer and software design, have very low barriers to entry. Relying on prior user rights in these highly competitive and fluid fields would not be a wise decision.

D. Getting Left Behind

Another practical concern with relying on prior user rights is that, even if an inventor can establish the right with respect to the relevant patent, the right only extends to the subject matter for which the prior user can demonstrate the established commercial use. If the patent is broader than the established use, the prior user is still prohibited from expanding his use into the remaining subject matter of the patent.⁶³ Thus, the prior user cannot improve his use of the invention where those improvements are subject to the patent. In effect, for an inventor to reasonably rely on prior use, the inventor must be willing to be locked into the technology for the life of the possible patent, potentially twenty-one years.

To be sure, it is possible for the prior user to develop improvements that are beyond the scope of the patent and therefore available to any competitor. The prior user may also seek a license from the patentee to practice improvements that are covered in the scope of the patent. However, both of these are added costs that a prior user would not have had to incur in the event the prior user had

63. § 273(e)(3).

originally sought patent protection. Furthermore, the potential benefit from relying on prior user rights is uncertain. For example, a patent may be drafted broadly enough to make inventing around it difficult. And in industries where the number of competitors is low, the inventor or company owning the patent may be very reluctant to allow a competing prior user to practice the improved invention without substantial licensing fees.

While some inventions may still be useful and competitive without further improvement for over twenty years, in today's fast-moving business environment, such inventions are few and far between. Moreover, what company is willing to practically hand over the reins of innovation in its field to a competitor who establishes a patent, while the company itself relies on a prior user right for constricted and possibly outmoded inventions? Making such a decision *ex ante* for the wrong invention would sound the death-knell in the long run for any inventor's business.

E. Legal Uncertainties in Statutory Interpretation and Liability

Finally, the prior user right is relatively new to American law and therefore comes with many uncertainties in interpretation and liability. For example, a potential prior user today does not know what kinds of use are considered "commercial use." The courts might interpret "commercial use" in harmony with "public use," a term that is used in section 102(b) of the 1952 Act and reused in section 102(a)(1) of the AIA-amended code. Since the term has been in use, it has been construed by courts⁶⁴ and would therefore provide some predictability for inventors respecting "commercial use." But then again, they may not. After all, a public display of an invention at a trade show may not be commercial for purposes of the prior use defense, but it is public for purposes of prior art.

Also, a prior user that raises the defense, fails, and then fails to show a reasonable basis for raising it will be liable for the patentee's attorney fees in addition to the damages for infringement and the practical business costs of stopping the infringement.⁶⁵ How much evidence must a party demonstrate of its prior use to create a "reasonable basis"? This too is unclear, and could be very costly to the inventor who guesses here.

Such legal uncertainties in interpretation will give any inventor (or more likely, the attorney advising that inventor) pause

64. *E.g.*, *Netscape Commc'ns Corp. v. Konrad*, 295 F.3d 1315, 1320 (Fed. Cir. 2002).

65. § 273(f).

when considering reliance on prior user rights. Moreover, the particular issues identified here, to name just two, are not features of the prior user right instituted by the AIA. These elements have been in the law since 1999, when Congress passed AIPA and established the prior user right solely for business methods.⁶⁶ Why have the courts not addressed such seemingly important issues in the law in over twelve years? Only one judicial opinion has ever been issued on any part of the prior use defense, and that opinion concerned whether a particular method was in fact a business method subject to the defense.⁶⁷ Given the expansion of prior user rights to all patents, this issue is now moot. Thus, in the twelve years that a limited prior use right has existed, defendants have been particularly loath to raise the defense, most likely due to the harsh penalty for improperly raising prior use, the problem of proving prior use, and the legal uncertainties surrounding its interpretation.

V. CONCLUSION

So, who would make an ex ante decision to rely on prior use rights? Ultimately, it would likely be a company with a concealable, commercially useful, minor improvement to a process, composition of matter, or machine in a market with few private competitors, no university competitors, and high barriers to entry, and where that company is not concerned with being locked into the invention for the next two decades and has the internal trade secret protection and documentation procedures to be able to prove the secret use in court if necessary. Clearly, there are few companies in this position. For most inventors that decide to rely on trade secret law rather than patent law for protection, prior user rights will not be the factor that tips the scales. Moreover, the prior user right will not protect the inventions or harm the small businesses and individual inventors that critics of the prior user right claim to be concerned about. Boeing might protect a minor improvement to its jet engine from an Airbus patent by prior user rights, but there is little chance that a small company or solo inventor will even attempt to enter the airplane market to take advantage of the invention and then be harmed by Boeing's prior user right. And to the extent companies decide to protect such minor inventions by prior user rights rather than clogging up the USPTO with poor quality patents, perhaps that is a good thing.

66. 35 U.S.C. § 273(a)(1), (b)(8) (2006) (amended by the AIA).

67. *Sabasta v. Buckaroos, Inc.*, 507 F. Supp. 2d 986, 1004–05 (S.D. Iowa 2007). The defendant's process was not a business method in that case. *Id.*