

AIA: The Building Block of Communal Innovation

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I. INTRODUCTION

The U.S. Constitution grants Congress the power to “promote the progress of Science and the useful Arts.”¹ It is through this power that Congress has enacted various Patent Acts.² Congress began doing so in 1790, and did so most recently with the Leahy-Smith America Invents Act (“AIA”).³ These laws have been aimed towards protecting the integrity of the patent system as well as providing a property interest to those inventors who seek to be within the ambits of the protection patent law purports to provide.⁴

The prototypical inventor of 1790 was similar to Alexander Graham Bell—an individual who worked independently to develop ideas in his garage at home.⁵ Since then, the image of an inventor has evolved.⁶ Research suggests that the type of innovation most commonly recognized in the United States is no longer based on an individual inventor.⁷ Instead, the general public is more apt to recognize the innovation of large corporations that hire personnel to work as a team in large laboratories.⁸

Previous scholarly articles have suggested that with recent significant changes to U.S. patent laws, specifically related to a change from a first-to-

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¹ U.S. CONST. art. I, § 8, cl. 8; David W. Trilling, *Recognizing a Need for Reform: The Leahy-Smith America Invents Act of 2011*, 2012 U. ILL. J.L. TECH. & POL’Y 239, 246 (2012).

² See Ivar M. Kaardal, *The American Inventors Protection Act, the Independent Inventor’s Interest & Consumer Choice in the Market*, 84 J. PAT. & TRADEMARK OFF. SOC’Y 503, 504 (2002); Trilling, *supra* note 1, at 242.

³ Trilling, *supra* note 1, at 242; see also Harvard Law Review Association, *Patent Law — Patentable Subject Matter — Leahy-Smith America Invents Act Revises U.S. Patent Law Regime. — Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (to be codified in scattered sections of 35 U.S.C.)*, 125 HARV. L. REV. 1290, 1290 (2012) [hereinafter *Patent Law — Patentable Subject Matter*].

⁴ Comm. on the Judiciary, Revision of Title 35, United States Code, H.R. REP. NO. 1923, at 1 (1952) [hereinafter *Revision of Title 35*].

⁵ Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 VA. L. REV. 1575, 1583 (2003).

⁶ *Id.* at 1583–84 (noting that the role of individual inventors has changed, and that their role “is much greater in some industries, such as mechanics and software, than in others, like biotechnology and semiconductors.”).

⁷ *Id.*

⁸ *Id.*

invent patent system to a first-to-file system, there is likely to be a rush to file patent applications.⁹ Those articles have focused primarily on inventors who seek to obtain patent rights quickly in order to protect their inventive interests. One article suggests that rushing to file patent applications may be risky because those inventions may be mediocre and not truly ready for patenting.¹⁰ Another suggests that small inventors will be able to obtain a patent if they use disclosure as a tool and take advantage of the one-year grace period after publishing their invention.¹¹ A recently published article predicts that the changes promulgated by the AIA will decrease the traditional patenting behavior of individual inventors, while comparing U.S. and Canadian patent law.¹² It further argues that the changes to the U.S. patent laws will result in a reduction in the amount of patents granted to individual inventors.¹³ However, it fails to discuss the role individual inventors can play in being the impetus of societal change. They would do so by adopting a policy of publishing their inventions, instead of seeking patent protection, affirmatively granting the public the right to the invention.¹⁴

This Note discusses unsuccessful Congressional measures to protect the interests of individual inventors. In light of these unsuccessful measures, individual inventors are likely to benefit from strategically disclosing their inventions and engaging in communal innovation to protect their inventive interests.¹⁵ These measures will not only benefit the individual inventor, but also fulfill the growing demand of the general

⁹ With the new changes to United States patent law, specifically to a first-to-file system a “major concern . . . is that [such a system] will lead to lower-quality patent applications. Clearly, a first-to-file system encourages inventors to submit a patent application as quickly as possible following invention.” David S. Abrams & R. Polk Wagner, *Poisoning the Next Apple? The America Invents Act and Individual Inventors*, 65 STAN. L. REV. 517, 551 (2013). “Under the first-to-file rules . . . 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.” Brad Pedersen & Vadim Braginsky, *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?*, 7 MINN. J.L. SCI. & TECH. 757, 761 (2006); Karen E. Simon, *The Patent Reform Act’s Proposed First-to-File Standard: Needed Reform or Constitutional Blunder?*, 6 J. MARSHALL REV. INTELL. PROP. L. 129, 137 (2006) (arguing that a first-to-file standard for priority at the United States Patent and Trademark Office will lead to “incomplete patent applications due to the pressure to file first.”).

¹⁰ See Abrams & Wagner, *supra* note 9, at 522; see also Simon, *supra* note 9, at 137.

¹¹ Michael A. Shinall, *Priority and Disclosure: Challenges and Protections to Small Inventors in a First-to-File World*, 94 J. PAT. & TRADEMARK OFF. SOC’Y 362, 365 (2012) (arguing that small inventors can protect their inventions and obtain patent protection by using a “system of priority” and bar others from gaining patent protection).

¹² Abrams & Wagner, *supra* note 9, at 544–50.

¹³ *Id.* at 517–18 (“While the net welfare impact that can be expected from a shift to first-to-file is unclear, our results reveal that, contrary to the conventional wisdom, the March 2013 implementation of a first-to-file rule in the United States is likely to result in a reduced share of patents granted to individual inventors.”).

¹⁴ See generally *id.*

¹⁵ See generally Kaardal, *supra* note 2.

public for new and improved products.¹⁶

Section II presents a historical overview of the various patent laws of the United States, discussing changes to the patent laws from 1790 up to the AIA, recently enacted in 2013. These changes, while based on the recognition of challenges faced by individual inventors, have resulted in a diminished focus on individual inventors as the driving force of innovation.¹⁷ Instead of increasing the number of individual inventors who are patent owners, legislative efforts have failed to adequately protect the interests of individual inventors.¹⁸

Section III discusses one of the most recent changes to U.S. patent law. Focusing primarily on the AIA, it argues that it is a part of the trend of Congressional measures aimed to protect the interests of individual inventors—attempts that continuously fail. This section suggests that in conjunction with traditional patent law principles, the AIA allows individual inventors to use creative measures to protect their inventive interests as well as play an active role in societal development.¹⁹ While traditional U.S. patent law has afforded some protection in the past, this Note suggests that the changes brought about by the AIA places particular emphasis on using a three-step protection module.²⁰ There are three steps an individual inventor can currently take to increase his ability to obtain patent protection for an invention in a first-to-file patent system: (1) publish the details of his invention to preempt another inventor's right to obtain property rights in the invention; (2) file a provisional patent application within a year after he has published the invention; and, (3) within a year after filing the provisional application, file a non-provisional patent application claiming the benefit of the previously filed provisional patent application.

While the three steps discussed in Section III will extend the time an inventor has to gain access to U.S. patent rights by two years, Section IV proposes that the interest of individual inventors and the general public are best served when inventors focus on publishing and communal innovation. It further analogizes this concept to a principle of copyright law—users' rights—showing that by freely giving the public the details of his invention, an inventor initiates the advancement of society and will fulfill one of the important roles of patent law, progress. It argues that the AIA fuels the need for individual inventors to strategically disclose their

¹⁶ *Id.*

¹⁷ *Id.* at 504.

¹⁸ *Id.*

¹⁹ Joe Matal, *A Guide to the Legislative History of the America Invents Act: Part I of II*, 21 FED. CIR. B.J. 435, 478 (2011–12) (suggesting that individual inventors can use changes to the America Invents Act to their advantage); Kaardal, *supra* note 2, at 504.

²⁰ See Matal, *supra* note 19, at 478.

inventions and then proposes that inventors will best benefit from these disclosures when they are coupled with communal innovation.

II. A GLANCE AT U.S. PATENT HISTORY: CONGRESSIONAL MEASURES TO PROTECT INDIVIDUAL INVENTORS

In order to see the direction the U.S. patent system is heading, it is best to look at the history of U.S. patent laws, which demonstrates a trend of failed Congressional attempts to protect the interests of individual inventors.

A. An Overview of the History of Patent Law

The United States Constitution has granted Congress the power to “promote the Progress of Science and the useful Arts, by securing for limited Times to . . . Inventors the exclusive Right in their respective . . . Discoveries.”²¹ In an attempt to fulfill this role, Congress passed various Acts.²² These Acts brought about various changes that have directly impacted individual inventors and their access to the patent system, as well as U.S. patent laws and the public’s perception of them.²³

The Patent Act of 1790 was the first federal statute enacted under the power granted to Congress by the United States’ Constitution.²⁴ This Act established a patent system in the United States, granting an inventor the exclusive right for fourteen years, to make, construct, use, and sell his patented invention to others.²⁵ Whether a patent was to be approved was at the discretion of the Patent Board, which is comprised of the Secretary of State, Secretary of War, and Attorney General.²⁶ However, the Board had difficulty finding sufficient time to manage the system.²⁷ This led to the Patent Act of 1793, which eliminated the patent examination procedure and deferred to the courts the ability to determine the validity of patents.²⁸

While the Patent Act of 1793 addressed some of the gaps of the Patent

²¹ U.S. CONST. art. I, § 8, cl. 8; *See also* Trilling, *supra* note 1, at 246.

²² *See* Trilling, *supra* note 1, at 242–44 (outlining the historical significance of the Patent Act of 1790, the Patent Act of 1836, and the Patent Act of 1952); Ryan M. Corbett, *Harmonization of U.S. and Foreign Patent Law and H.R. 2795: The Patent Reform Act of 2005*, 18 FLA. J. INT’L L. 717, 718 (2006) (“Throughout its long history, American patent law has experienced many procedural and substantive changes, with some changes coming from domestic pressure while others are due to international influences.”).

²³ *See* Trilling, *supra* note 1, at 242–44 (outlining the historical significance of the Patent Act of 1790, the Patent Act of 1836, and the Patent Act of 1952).

²⁴ *Revision of Title 35, supra* note 4, at 4; Trilling, *supra* note 1, at 242.

²⁵ Trilling, *supra* note 1, at 242.

²⁶ *Id.*

²⁷ *Id.*

²⁸ *Id.*

Act of 1790,²⁹ there was a call to reform the then-lax patent system and the Patent Act of 1836 was enacted.³⁰ The Patent Act of 1836 became an icon for industrialized nations and was revolutionary in the changes it brought in the United States.³¹ One of the revolutionary aspects of the new patent system involved the creation of the United States Patent and Trademark Office (“USPTO”).³² The USPTO was created as a separate and independent organization within the United States Department of State.³³ The Patent Act of 1836 was effective in increasing the speed of prosecuting patent applications.³⁴ This was most likely due to the addition of a Patent Commissioner and clerks to the USPTO.³⁵ The addition of a library, which housed scientific works and periodical publications, served to assist the members in determining whether patent applications should be granted.³⁶ The development of a much more organized patent office resulted in an efficient patent prosecution system.

Several amendments were made to the Patent Act of 1836, but it was the Patent Act of 1870 that would bring some of the most significant changes.³⁷ This new Act focused on revising, arranging, and consolidating the various patent statutes.³⁸ It not only focused on patent law, but also included statutes relating to copyrights and trademarks.³⁹

The Patent Act of 1952 brought about another significant change to U.S. patent law.⁴⁰ The principal purpose of the Act was to codify Title 35 of the United States Code, which outlines US patent law.⁴¹ It not only clarified the language and arrangement of the laws, and eliminated unnecessary provisions, but also adopted several suggestions for amending the patent laws.⁴² For example, it changed the requirement of patentability by providing that a patent must not only be new and useful, but also non-obvious.⁴³

The American Inventors Protection Act of 1999 (“AIPA”), discussed

²⁹ *Id.*

³⁰ *Id.* at 243.

³¹ Trilling, *supra* note 1, at 243.

³² *Id.* (the United States Patent and Trademark Office was the first patent office).

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Revision of Title 35, supra* note 4, at 3–5.

³⁸ *Id.* at 2.

³⁹ *Id.*

⁴⁰ *Id.* at 1, 5; Trilling, *supra* note 1, at 244.

⁴¹ *Revision of Title 35, supra* note 4, at 1, 5.

⁴² *Id.* at 3.

⁴³ *Id.* at 16–18; *see also* Trilling, *supra* note 1, at 243 (“[T]he new legislation included a requirement that an invention not only be new and useful, but also be “non-obvious” before it was granted a patent.”).

in detail below, also brought about important changes to U.S. patent laws.⁴⁴ One of the goals of this act was to harmonize U.S. patent laws with the laws of other countries.⁴⁵ Ideally, the harmonization of U.S. patent laws with those of other countries makes it easier to file multiple international patent applications. One of the key changes brought about by the AIPA is that it provided for the publication of a patent application eighteen months after its filing date.⁴⁶ This is particularly significant because it provided for the disclosure of the inventions of applicants. While applicants can, under certain limited circumstances, prevent their patent applications from being published, the default rule is that all patent applications are published.⁴⁷

B. From 1790 to 2013: Recognizing the Challenges of Individual Inventors

Over the past century, there has been growing criticism of the legislature's focus on corporate entities, rather than individual inventors.⁴⁸ The legislative efforts' focus on creating and protecting the interests of institutional entities suggests that the previously held view of individual inventors as the drivers of innovation has declined and instead corporate inventors have begun to dominate the patent market.⁴⁹

When the interests of individual inventors are not advanced or protected by changes in patent law, there is an increased mistrust in the patent system.⁵⁰ This criticism and mistrust of the U.S. patent system, particularly where individual inventors are concerned, have been documented since the nineteenth century.⁵¹ Two reasons for this have been noted. First, once patent rights were granted, a monopoly was created that would prevent the public from utilizing the subject of the patent.⁵² Second, if an individual inventor was

⁴⁴ See Corbett, *supra* note 22, at 722.

⁴⁵ *Id.* at 718.

⁴⁶ *Id.* at 722.

⁴⁷ *Id.*

⁴⁸ *Beech Aircraft Corp. v. EDO Corp.*, 990 F.2d 1237, 1248 (Fed. Cir. 1993) ("It is elementary that inventorship and ownership are separate issues."); *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 491 (1974) ("The inventor faces pressures not only from private industry, but from the skilled scientists who work in our universities and our other great publicly supported centers of learning and research.")

⁴⁹ *Kaardal*, *supra* note 2, at 504; *Bilski v. Kappos*, 130 S. Ct. 3218, 3228 (2010) ("With ever more people trying to innovate and thus seeking patent protections for their inventions, the patent law faces a great challenge in striking the balance between protecting inventors and not granting monopolies over procedures that others would discover by independent, creative application of general principles.")

⁵⁰ See Christopher R. Leslie, *Trust, Distrust, and Antitrust*, 82 TEX. L. REV. 515, 517 (2004); D. J. Brewer, *The Patent System*, 3. YALE L.J. 149, 149 (1894).

⁵¹ See generally Brewer, *supra* note 50.

⁵² *Id.* at 154.

granted patent protection for his invention, he would be unable to exercise the rights granted due to financial difficulties.⁵³ For example, if a wealthy manufacturer infringes the patent right of the individual inventor, and the inventor is unable to pay the expense associated with litigation, he may be left with only two choices: (1) allow the public to freely practice his invention and give up any rights to exclude; or, (2) sell his patent rights for an miniscule amount to a wealthy manufacturer who in turn monopolizes the market by excluding all others from manufacturing the patented invention.⁵⁴ The first of the two choices entails donating knowledge that the public can use to improve their daily lives, either by using the invention disclosed or improving it in a manner useful to that individual or society. The second is more restricting on the development of society because it allows one entity to control whether or not anyone can use the information and ideas disclosed in a patent.

As evidenced above, the result of this mistrust is that individuals are reluctant to invest in patent rights.⁵⁵ With a perception that a grant of patent rights does not necessarily mean that one will get to reap the benefits of the financial investment and dedication that went into perfecting one's invention, individual inventors are sometimes hesitant to go through the tedious process of filing for patent protection.⁵⁶ Even Thomas Edison is noted to have said "he would have been better off pecuniarily [*sic*] if he had never taken out a patent on any of his inventions."⁵⁷

This distrust in the patent system did not wane over the next two centuries. While recognizing that public interest is the ultimate goal of the patent act,⁵⁸ the patent system continued to face attacks and struggled to overcome the predominant view of being a system

⁵³ *Id.* at 155 ("The issue of a patent is not the end but the beginning of trouble.").

⁵⁴ *Id.*

⁵⁵ *Id.* at 149.

⁵⁶ *Id.* ("[P]arties invest in patent rights reluctantly, and with much hesitation, and . . . the real inventor seldom reaps the proper reward for his invention."); Wendy J. Gordon, *Introduction*, 108 *YALE L.J.* 1611, 1612 (1999) ("[T]he law should prohibit all 'poaching,' all 'reap[ing] where one has not sown.'").

⁵⁷ Brewer, *supra* note 50, at 149.

⁵⁸ Christopher S. Marchese, *Promoting the Progress of the Useful Arts by Narrowing Best Mode Disclosure Requirements in Patent Law*, 54 *U. PITT. L. REV.* 589, 618 n.167 (1993) (quoting *Mercoid Corp. v. Mid Continent Inv. Co.*, 320 U.S. 661, 665 (1944) ("It is the public interest which is dominant in the patent system.")).

which facilitated the maintenance of monopolies created by large corporations.⁵⁹ This shortcoming of the system is considered to be a cause of the economic miseries of the 1930s.⁶⁰ Skepticism about the U.S. patent system survived World War II and blossomed again in the depressed economic conditions of the 1970s, a period of strong anti-trust enforcement.⁶¹ However, patent law gradually became identified as essential to the production of innovations.⁶² This led to the recognition that in order to produce innovations that would lead to progress in the American society, inventors had to be given incentives to work towards producing innovation and disbursing them to the general public.⁶³

III. RECENT CHANGES TO THE U.S. PATENT SYSTEM THAT IMPACT INDIVIDUAL INVENTORS

This section discusses two recent Acts that brought about significant changes to the U.S. patent system, the AIPA and the AIA. The AIPA of 1999, mentioned above in a historical overview of the United States patent system, sought to protect individual inventors from using invention marketing firms, which often took advantage of their ignorance of US patent law, and established the default rule that all patent applications must be published eighteen months after being filed. Later, the AIA brought substantial changes to the U.S. patent system, namely, the switch from a first-to-invent system to a first-to-file system.

A. The Beginning: American Inventors Protection Act

During the 1920s and 1930s, a bill was proposed to control invention marketing firms (“IMFs”).⁶⁴ IMFs knew that most independent inventors were not ready to market their inventions.⁶⁵ Using this knowledge, they purported to assist these inventors to obtain patents, market their inventions, obtain business contacts, and provide assistance to reap any potential commercial value the inventions may have.⁶⁶ However, there was strong indication that these firms took advantage of individual

⁵⁹ *A Brief History of the Patent Law of the United States*, LADAS.COM, <http://perma.cc/P92U-P6EX> (last updated Jul. 17, 2009).

⁶⁰ *Id.*

⁶¹ *Id.*

⁶² Marchese, *supra* note 58, at 618.

⁶³ *Id.*

⁶⁴ Kaardal, *supra* note 2, at 507.

⁶⁵ *See id.* at 506.

⁶⁶ *Id.*

inventors instead of assisting them. The purpose of the bill was to address the prevalence of IMFs and the unfair advantage they had over individual inventors.⁶⁷ However, it was met with hostility and never passed.⁶⁸

In the late 1990s, there was another movement to address the concern of IMFs taking advantage of individual inventors.⁶⁹ This led to the enactment of the AIPA in 1999.⁷⁰ The AIPA imposed a broad disclosure requirement on IMFs providing services to inventors, created a forum for consumers to make complaints, and created a private cause of action for violations of the Act.⁷¹ Proponents of the bill argued that the Act would address the issue of inventors being taken advantage of by IMFs.⁷²

However, the AIPA also met various forms of criticism for failing to adequately address the needs of the individual inventor.⁷³ One of the criticisms it faced was that since individual inventors less lucrative opportunities to the typical large firm, they could only obtain patent prosecution services from a few private attorneys who—according to a study conducted in the 1960s—did not have adequate training and would be unable to properly advocate for their interests.⁷⁴ Another criticism was that even though an individual inventor could file and prosecute their own patent applications, the assistance of attorneys would be in their best interest, and the AIPA failed to provide for the availability of such patent prosecution services to them.⁷⁵ While the criticism of the AIPA waned over time, the concern for the interest of the individual inventor would again be seen in the AIA.

B. The America Invents Act

The AIA, discussed briefly in other sections of this Note, was signed into law by President Obama on September 16, 2011.⁷⁶ The AIA is a landmark bill that brings about significant changes to U.S. patent law and has the fundamental goal of harmonizing the United States patent laws

⁶⁷ See *id.* at 508.

⁶⁸ *Id.* (noting that the Association of Inventors and Engineers was formed to specifically oppose the bill).

⁶⁹ *Id.* at 509.

⁷⁰ Kaardal, *supra* note 2, at 509 (“Th[e] same desire to protect independent inventors founded proposals for the legislation that was ultimately passed as the ‘American Inventors Protection Act’ in 1999.”). As discussed previously, the AIPA also required that all patent applications, with only a few limited exceptions, be published eighteen months after their filing date. See also Corbett, *supra* note 22, at 722.

⁷¹ Kaardal, *supra* note 2, at 510.

⁷² *Id.* at 509.

⁷³ See generally *id.* at 521–24.

⁷⁴ *Id.* at 521.

⁷⁵ *Id.*

⁷⁶ *Patent Law – Patentable Subject Matter*, *supra* note 3, at 1291; Matal, *supra* note 19, at 447.

with those of other countries.⁷⁷ One of the most radical changes made to the patent system by this Act is that it changes it from a first-to-invent system primarily based on absolute novelty, to a first-to-file system.⁷⁸ Under the new rules of the AIA, the first inventor to file a patent application has priority over an inventor who files a patent application later.⁷⁹ This is the case unless the first applicant did not invent the particular subject matter claimed or another previously disclosed it to the public.⁸⁰

The path to enactment of the AIA consisted of six years of legislative activity.⁸¹ The bill was initially introduced in the 109th Congress in 2005, and subsequently reintroduced in later sessions, but was finally adopted by the 112th Congress in 2011.⁸² During the 110th Congress, several changes were made to the initially proposed bills because they were not met with universal support.⁸³ For example, both houses “eliminated the . . . prior-user rights defense to all utility patents,” a corollary of a first-inventor-to-file system.⁸⁴ In addition, they limited challenges to the validity of a patent issued over a year ago to only those based on anticipation and obviousness.⁸⁵

1. First-to-File vs. First-to-Invent

a. Arguments for a First-to-File System

Debates over whether the switch from the first-to-invent to the first-to-file system of other countries were uncontroversial during the first five years when Congress considered proposals to shift the United States away from its traditional system. However, in March 2011 the switch became a

⁷⁷ Matal, *supra* note 19, at 438.

⁷⁸ Mark J. Patterson & M. Andrew Pitchford, *First to File: ‘America Invents Act’ Changes Paradigm for Patents*, 47 TENN. B.J. 14, 15 (2011) (absolute novelty exists where the first applicant to file a patent application is only entitled to a patent when they actually invented the matter for which the patent is sought and the matter was not available to the public before filing).

⁷⁹ *Id.*; See also Michael A. Glenn & Peter J. Nagle, *Article I and the First Inventor to File: Patent Reform or Doublespeak?*, 50 IDEA 441, 455 (2010) (“[T]he Constitution states that this exchange—relinquishing an idea for the legally recognized property right—belongs to the inventor. Therefore, the only proper party to this exchange is the person who made the invention.”).

⁸⁰ Patterson & Pitchford, *supra* note 78, at 15; see also Glenn & Nagle, *supra* note 79, at 455.

⁸¹ Matal, *supra* note 19, at 437–38 (“Many provisions of the AIA give the United States Patent and Trademark Office (‘USPTO’ or ‘Office’) new authority and were drafted in close consultation with the Office, and legislative statements disclose how the Office anticipated that it would use that authority once it was enacted into law.”).

⁸² *Id.* at 438–47.

⁸³ *Id.* at 441 (noting that changes made to the Leahy and Berman bills were adopted in the final version of the America Invents Act).

⁸⁴ *Id.*

⁸⁵ *Id.*

focal point of debate.⁸⁶ According to the final Committee Report's analysis of the AIA's inclusion of a first-to-file system as a part of its improvements, an amendment to 35 U.S.C. § 102 made "an invention's priority date its effective filing date."⁸⁷ The switch stimulated discussions regarding whether the United States should adopt the system used in numerous foreign countries.

The reasons for adopting a first-to-file patent system were outlined in the final Committee's Report:

(1) a patent's filing date is objective and simple to determine, whereas an invention date "is often uncertain, and, when disputed, typically requires corroborating evidence as part of an adjudication"; (2) the first-to-file system would avoid the expense and burden of interference proceedings and eliminate the need for inventors to maintain recording and document-retention systems; and (3) because many U.S. inventors and companies file for patent protection in foreign countries (which all use the first-to-file system), they "are forced [by the United States' maintenance of the first-to-invent system] to follow and comply with two different filing systems."⁸⁸

Advocates for a first-to-file system adopted the first reasoning in the Committee's Report, arguing that the adoption of the system would be more objective than the first-to-invent system.⁸⁹ In addition, where there are two patent applications claiming the same invention, a small inventor would be at a disadvantage because it was generally an expensive process to resolve the dispute of who was the first to invent and had the right to the potential patent.⁹⁰ Referred to as interference proceedings, these proceedings "were generally too expensive to be pursued by *small inventors*," and the chances of them having the proceeding resolved in their favor were fairly slim.⁹¹

Even though individual inventors rarely prevailed in interference proceedings, it was argued that they could use the availability of provisional patent applications to establish first-to-file priority.⁹²

⁸⁶ *Id.* at 453.

⁸⁷ H.R. REP. No. 112-98, pt. 1, at 73 (2011).

⁸⁸ Matal, *supra* note 19, at 453.

⁸⁹ *Id.* at 454-55.

⁹⁰ *Id.*

⁹¹ *Id.* (emphasis added).

⁹² *Id.* at 455.

Provisional applications, which expire a year after they have been filed, are inexpensive and do not require a detailed showing of an invention to establish a priority date under the traditional first-to-invent system.⁹³ Therefore, inventors pressed for time have the option of submitting “logbooks and notes to establish a priority date under the [traditional] first-to-invent system.”⁹⁴ The benefit of a first-to-file system is further supported by the fact that in the previous seven years before the AIA was passed, when over three million patent applications were filed, “only one *individual inventor* who was not the first to file his patent application . . . prevailed in an interference proceeding.”⁹⁵ This suggests that individual inventors would not be unduly disadvantaged by a first-to-file system. If the majority of inventors who are successful in interference proceedings are those who were first to file their patent applications, this may suggest that they are also generally the first to invent, and would ultimately prevail in interference proceedings.

While preliminary arguments for a first-to-file system appeared to be centered around the potential benefit that could be afforded to individual inventors, Senator Patrick Leahy, one of the key proponents of the AIA, argued that one of the benefits of the switch to a first-to-file system was that it would benefit U.S. companies, as opposed to individual inventors.⁹⁶ The argument focused primarily on the challenges faced by U.S. companies seeking to protect their inventions in other countries.⁹⁷ Due to this key difference in the patent rules, companies often struggled to determine when and how to file their patent applications. The AIA serves to harmonize these rules. Since most foreign countries operated on a first-to-file system, the traditional first-to-invent system posed challenges when these companies sought to comply with two manifestly different laws.⁹⁸ It is not surprising that Senator Leahy argued for protecting the interests of large U.S. companies. Large companies most likely have the largest patent portfolios, it is logical that any system proposed would benefit those who can afford to invest the most money in the U.S. patent system. Without adequate funding, the U.S. patent system would be inoperable.

b. Arguments Against a First-to-File System

Two main arguments were made against the adoption of a first-to-file

⁹³ *Id.*

⁹⁴ Matal, *supra* note 19, at 455.

⁹⁵ *Id.* at 457 (emphasis added).

⁹⁶ *Id.* at 455 (arguing that “the first-to-file system would be simpler, less expensive, and would eliminate the need for U.S. companies to comply with two different systems when they sought to protect their inventions abroad”).

⁹⁷ *Id.*

⁹⁸ *Id.*

system.⁹⁹ (1) it would be adverse to the interest of the public; and, (2) it is unconstitutional.¹⁰⁰

According to Senator Dianne Feinstein, the adoption of a first-to-file system would be adverse to the interests of small inventors and small business for several reasons.¹⁰¹ She posited that it would result in a rush to the patent office because inventors would feel pressured to file their inventions and would do so without actually determining the viability of their inventions.¹⁰² Inventors won't be able to utilize the pre-AIA one-year grace period after offering their invention for sale or using it in public.¹⁰³ In addition, while provisional applications could be filed and provide the benefit of a one-year grace period before inventors file their non-provisional patent application, filing a provisional application would not offer a solution for a small inventor, because such applications cannot be treated less seriously than a complete non-provisional patent application.¹⁰⁴ This is because if any information is inadvertently omitted from a provisional application, the inventor is unable to claim it in a non-provisional application.¹⁰⁵

In addition, Senator Feinstein argued that the first-to-file system was problematic because of difficulties proving that someone else had copied an invention, and because victims to such copying were not provided adequate remedies through derivation proceedings.¹⁰⁶ The Senator's position was evidenced in a proposed amendment to the AIA.¹⁰⁷ The proposed amendment garnered support from Senator James E. Risch, who argued that "[t]he person who created the invention [is entitled to] . . . the benefits of that creation, not the person with the fastest tennis shoes."¹⁰⁸ In essence, although someone may not have been the first to come up with a

⁹⁹ *Id.* at 455, 461–62.

¹⁰⁰ Matal, *supra* note 19, at 461–62. The U.S. Constitution allows *inventors* to have exclusive rights to their discoveries, which suggests that patent rights should only be granted to someone who is actually the first to *invent*, not the first to *file*.

¹⁰¹ *Id.* at 459; Kevin Noonan, *Senator Feinstein Opposes First-to-File Provisions of Patent Reform Bill (S. 23)*, PATENT DOCS BLOG, (Mar. 3, 2011), <http://perma.cc/G49K-C29T> ("I've heard more and more in the past two years from small . . . inventors, startup companies, small businesses, venture capitalists, and yes even large companies, from all around our country . . . that this proposed transition, from our first to invent system to a first to file system would be severely harmful to innovation, and especially burdensome on small inventors . . . [a]nd I have become convinced that it's the wrong thing to do.").

¹⁰² Matal, *supra* note 19, at 455–56.

¹⁰³ *Id.* at 455.

¹⁰⁴ *Id.* at 456.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ *Id.* at 455, 459 (Senator Feinstein sought to eliminate the first-to-file provisions from the AIA by arguing that numerous "dead end" applications would result from it).

¹⁰⁸ Matal, *supra* note 19, at 459 (noting that Senator James E. Risch made a fairness argument towards retaining the traditional first-to-invent system).

novel idea that will benefit the public, if they have the capital to hire patent attorneys to prosecute their patent applications, they will most likely be the first to file their patent applications. What happens when an individual inventor comes up with a patentable idea, tests it on the marketplace, and maintains it as a secret in order to obtain the necessary funds to file a patent application? If a U.S. company is able to reverse-engineer that product, even though they were not the first inventor, they will be able to obtain a patent on the invention.¹⁰⁹ Understandably, this resonates as unfair to many.

The second main argument against the adoption of the first-to-file provisions of the AIA was its constitutionality.¹¹⁰ To begin with, because it awards the person who won the race to the patent office and not the first actual inventor, it is in tension with the goal of the U.S. Constitution.¹¹¹ However, in *Gayler v. Wilder*, the Supreme Court held that “the party who invents is not strictly speaking the first and original inventor.”¹¹² By providing that a patent is invalid if the invention was known or used by others, the legislature meant the type of knowledge and use that exists in a mode the public has access to.¹¹³ Therefore, if a prior invention was kept a trade secret and was never accessible to the public, and a second individual invents the same product, the second inventor may be recognized by the patent office as the legitimate inventor.¹¹⁴

c. Is a First-to File System Truly Better?

While a first-to-file system will create an objectively measurable means by which to ascertain who first filed a patent application, it fails to adequately address the difficulties of resolving priority disputes in interference proceedings. Senators Orrin Hatch and Amy Klobuchar pointed out that only a small portion of independent inventors were able to prevail in interference proceedings.¹¹⁵ However, this merely echoes the fact that individual inventors are often disadvantaged in that they do not have adequate resources to defend against or support their case when involved in such proceedings. In fact, interference proceedings no longer

¹⁰⁹ This theory excludes the presence of any 35 U.S.C. § 102 bars to patentability.

¹¹⁰ Matal, *supra* note 19, at 461–62.

¹¹¹ *Id.*

¹¹² *Gayler v. Wilder*, 51 U.S. 477, 496 (1850).

¹¹³ *Id.* at 497; *In re Wyer*, 655 F.2d 221, 227 (CCPA 1981) (“[W]hether information is printed, handwritten, or on microfilm or a magnetic disc or tape, etc. . . sufficient proof of its dissemination or that it has otherwise been available and accessible to persons concerned with the art to which the document relates and thus must likely to avail themselves of its contents.”).

¹¹⁴ *Gayler*, 51 U.S. at 491. (If the public has no knowledge of the existence of an invention, it is “the same thing as if the improvement had never been discovered.”).

¹¹⁵ Matal, *supra* note 19, at 457.

exist with the complete adoption of the AIA.¹¹⁶

A strong indication that the first-to-file system was specifically set in place in favor of corporate entities was suggested by the statement of Senator Leahy: “[a first-to-file system will] eliminate the need for *U.S. companies* to comply with two different systems when they sought to protect their inventions abroad.”¹¹⁷ This efficiency argument is centered solely on making the U.S. patent system more efficient for corporate entities. Individual inventors were discussed as an afterthought when arguments were made against the adoption of a first-to-file system.

The AIA redefines novelty and prior art with respect to published inventions, and in doing so provides a tool that can be used by individual inventors to protect their inventive interests.¹¹⁸ Its amendment to 35 U.S.C. § 102(a) provides that an inventor is entitled to a patent unless that invention claimed was previously patented or “described in a *printed publication*. . . or otherwise available to the public” before the inventor filed for a patent for the claimed invention.¹¹⁹ Further, the AIA changed the definition of “grace period” when it amended Section 102(b) of Title 35.¹²⁰ Based on this new definition, the grace period provides certain exceptions when disclosures will not be deemed prior art.¹²¹ Such disclosures are given a one-year grace period and must be done by the inventor or an assignee of at least some rights in the invention.¹²²

Accordingly, if an individual inventor publishes or otherwise discloses their invention, regardless of how public such a disclosure is, as long as it occurred within one year prior to filing a patent application—provisional or non-provisional—the disclosure or publication will not be used against them as prior art.¹²³ This first-to-file system effectively has granted inventors a grace period – it has, in essence, created a first-to-publish rule.¹²⁴ A disclosure is likely to count as prior art against all other later inventors once a first-in-time inventor has publicly disclosed the invention.¹²⁵ When such a disclosure counts as prior art for applicants filing after the disclosure, they will be “locked out” of claiming that invention as their own.¹²⁶

¹¹⁶ See America Invents Act, 35 U.S.C. § 102(b)(2) (2011).

¹¹⁷ Matal, *supra* note 19, at 455 (emphasis added).

¹¹⁸ See America Invents Act, 35 U.S.C. § 102(a) (2011).

¹¹⁹ *Id.* (emphasis added).

¹²⁰ *Id.* § 102(b) (citing that grace periods were traditionally allowed for all publications that related to an invention, but are now only allowed for the inventors’ publication).

¹²¹ See *id.*

¹²² *Id.*

¹²³ Matal, *supra* note 19, at 476.

¹²⁴ *Patent Law – Patentable Subject Matter*, *supra* note 3, at 1291–92.

¹²⁵ *Id.*

¹²⁶ *Id.*

2. *Steps the AIA Advances to Protect the Interests of Individual Inventors*

While a first-to-file system will primarily benefit corporate entities, which are often better positioned to file patent applications soon after inventing, there are several steps an individual inventor can take to protect their inventive interests. This section provides a discussion of these steps: (1) quickly publishing their inventions; (2) filing provisional applications within a year of those publications; and (3) filing non-provisional applications within a year of filing provisional applications. The AIA encourages individual inventors to strategically disclose their inventions, because inventors will benefit most from disclosures coupled with communal innovation.

a. Step One: Publish Sooner

Increasingly, companies elect to publish their inventions, rather than file patent applications.¹²⁷ The significance of publishing an invention sooner is that it can serve as a defensive publication. Defensive publications have been endorsed by the USPTO as an intellectual property tool that can serve as prior art against other parties who later seek to patent that invention.¹²⁸ Until 1984, when the Patent Law Amendments Act was passed, defensive publication was the sole manner by which an inventor could strategically disclose his invention to preclude others from obtaining patent rights on the same matter.¹²⁹ Since one of the principles behind the U.S. patent law system is providing an inventor with the exclusive right to exclude all others from practicing his invention in exchange for a full disclosure of the invention to the public,¹³⁰ the dissemination of knowledge to the general public via defensive publications is in harmony with U.S. patent laws.

The AIA, through its amendment of 35 U.S.C. § 102(b)(1)(B), can lead to an increase in the number of invention disclosures made to complement, or in lieu of, the filing of patent applications.¹³¹ This can serve as a strategic method of patenting, whereby such publications cover both minor and major improvements to inventions.¹³² It is arguably efficient because when information is disclosed in a publication, it serves as prior art against

¹²⁷ See Oren Bar-Gill & Gideon Parchomovsky, *The Value of Giving Away Secrets*, 89 VA. L. REV. 1857, 1857 (2003).

¹²⁸ See generally *id.*

¹²⁹ *Id.*

¹³⁰ Todd E. Rinner, *Protecting Minor Improvements on Core Patents: Complementing Traditional Patent Protection with Strategic Disclosure*, 2 J. MARSHALL REV. INTELL. PROP. L. 398, 401 (2003).

¹³¹ Jason Rantanen, *The Effects of the America Invents Act on Technological Disclosure*, PATENTLYO.COM (Sept. 8, 2011), <http://perma.cc/54T-WECK>; Rinner, *supra* note 130, at 420–21.

¹³² See Rinner, *supra* note 130, at 398.

other inventors that file after the disclosure was made, preventing them from obtaining a patent on the same matter.¹³³ Because these kinds of publications can defend an inventor's claim to be the first inventor, referred to as defensive publications, they can serve as verifiable prior art with which inventors can immediately block later inventions that cover a similar matter.¹³⁴ In addition, since they serve as prior art references as of the date they are published, an individual's disclosure of his invention as soon as it is complete can be a particularly effective tool to bar others from patenting an invention. However, their effectiveness is measured by how much the publication meets one of the minimum requirements of patentability—enablement.¹³⁵ A publication is enabling if the information disclosed is sufficient to allow a person of ordinary skill in the art to make and use the invention.¹³⁶ However, only publications that fully describe the invention clearly and explain how to make or use it will serve as prior art.¹³⁷ Publications that only provide obscure or suggestive descriptions of an invention will not serve as prior art.¹³⁸ While this is the case, the publication does not need to disclose a utility or use for the invention.¹³⁹ In essence, even without a known use for the invention, an individual inventor's disclosure can serve as prior art against another inventive entity.¹⁴⁰

By combining defensive publication with patenting, an individual inventor can exclude a competitor from practicing the patented invention, and also preclude them from claiming patent rights to it.¹⁴¹ A provisional patent application can also be filed if the individual inventor is not yet ready to file a non-provisional patent application. Because non-provisional patent applications can be costly, individual inventors can reduce their up-front costs by electing to file a provisional application, which only requires a basic filing fee and does not require patent search or patent examination fees.¹⁴²

¹³³ *Id.* at 398–99.

¹³⁴ *Stand in Their Way with Defensive Publishing*, IP.COM, <http://ip.com/publish/defensive-publishing.html> (last visited Jan. 28, 2013).

¹³⁵ Rinner, *supra* note 130, at 410. The other two requirements of patentability, novelty and non-obviousness, do not have to be met in a defensive publication, but play their own significant role in the process.

¹³⁶ *Id.* In this context, the *art* is the area, or field of expertise, to which the invention pertains.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ Rinner, *supra* note 130, at 410.

¹⁴¹ *Id.* at 399, 421 (“Because no participant can expect to win every patent race, a better strategy may be to prevent the competition from winning the race.”).

¹⁴² As of January 2014, the cost of filing a provisional application is the basic filing fee (\$260), while the cost of filing a non-provisional utility application includes a basic filing fee (\$280), a patent search fee (\$600), and an examination fee (\$720). United States Patent and Trademark Office, *United*

b. Step Two: File Provisional Applications

Provisional applications should be filed, not with the intent to gain patent rights from them, but as a way to completely disclose the invention. A complete disclosure serves as an indication that the applicant reduced the invention to practice prior to the date the patent application was filed. In addition, it creates a priority filing date at the USPTO.¹⁴³ A priority date is obtained only if the applicant provides specific details about the invention. The priority rights granted upon filing a provisional application only last one year after filing.¹⁴⁴ Therefore, in order to prevent the loss of any patent priority rights, the inventor must also file a non-provisional application before the end of the one-year period.¹⁴⁵

A provisional application can serve as an effective tool to extend the term of the protection afforded by the grant of a patent.¹⁴⁶ By serving as a low cost way to obtain a priority date at the USPTO, it serves as a basis for filing a traditional non-provisional application within one year of filing the provisional application.¹⁴⁷ The added benefit of first filing a provisional application is associated with cost—it provides a simplified way of filing a patent application and requires low initial investment.¹⁴⁸

c. Step Three: File Non-Provisional Applications

A non-provisional patent application is the standard patent application and is the basis for establishing patent rights.¹⁴⁹ These rights are only granted where the invention is novel, useful, and nonobvious.¹⁵⁰ A non-

States Patent and Trademark Office Fee Schedule, USPTO.GOV, (revised Jan. 16, 2014), <http://perma.cc/F57E-H275>.

¹⁴³ 35 U.S.C. § 111(b)(5) (2011); Ryan K. Dickey, *The First-to-Invent Patent Priority System: An Embarrassment to the International Community*, 24 B.U. INT'L L.J. 283, 301 (2006).

¹⁴⁴ Dickey, *supra* note 143, at 301.

¹⁴⁵ *Id.*; United States Patent and Trademark Office, *Provisional Application for Patent*, Feb. 2011, USPTO.GOV, <http://perma.cc/YK89-TJH5> [hereinafter *Provisional Application for Patent*]. (“[A]n applicant who files a provisional application must file a corresponding non-provisional application for patent (non-provisional application) during the 12-month pendency period of the provisional application in order to benefit from the earlier filing of the provisional application.”) (last updated Apr. 16, 2013).

¹⁴⁶ *Provisional Application for Patent*, *supra* note 145 (“By filing a provisional application first, and then filing a corresponding non-provisional application . . . , a patent term endpoint may be extended by as much as 12 months.”).

¹⁴⁷ *Id.*; James Drake et. al., *Do You Need to Be an Intellectual to Understand What Intellectual Property Is?: A Primer on Intellectual Property*, 83 MICH. B.J. 16, 18 (2004).

¹⁴⁸ This “lower initial investment” gives the inventor an opportunity to “assess the invention’s commercial potential before committing to higher cost of filing and prosecuting a non-provisional application for patent.” *Provisional Application for Patent*, *supra* note 145.

¹⁴⁹ See 35 U.S.C. § 111(a) (2011).

¹⁵⁰ See United States Patent and Trademark Office, *Nonprovisional (Utility) Patent Application Filing Guide: A Guide to Filing a Utility Patent Application*, USPTO.GOV, <http://perma.cc/3SQM-CLRJ> (last updated Jan. 24, 2012).

provisional patent application can be filed soon after an inventor has conceived of his invention and is ready to put it to use.¹⁵¹ Putting it to use, or reduction to practice, can either be actual or constructive.¹⁵² Actual reduction to practice occurs when an inventor experiments with his invention to determine if it actually performs as is intended,¹⁵³ while constructive reduction to practice constitutes filing a patent application.¹⁵⁴

Similar to provisional applications, non-provisional patent applications must set forth the specific details of one's invention but must also include claims.¹⁵⁵ The claims in a non-provisional patent application define the metes and bounds of one's invention, and are the basis for future patent infringement cases.¹⁵⁶ The term of patent protection granted in a non-provisional patent is twenty years from the date of filing.¹⁵⁷ When used in conjunction with a publication, followed by the filing of a provisional patent application, an inventor can extend the time of their protection for up to two additional years: (1) one year with a publication which provides a basis for priority and serves as prior art against others; and (2) one year for patent priority rights provided when a provisional application is filed.¹⁵⁸

While the steps of disclosing an invention, filing of a provisional application within a year after the disclosure, and filing a non-provisional application may help secure patent rights, an individual inventor may benefit from moving away from such an incentivized way of thinking.

IV. AIA: ADVANCING THE SOCIETAL BENEFIT OF COMMUNAL INNOVATION

While the AIA advances the traditional incentivized way of thinking with regards to inventions, this Note proposes that inventors can best serve their interests, and the interests of the general public, by not only

¹⁵¹ *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 61 (1998) (“[It] is well settled that an invention may be patented before it is reduced to practice. In [1888], this Court upheld a patent issued to Alexander Graham Bell even though he had filed his application before constructing a working telephone.”).

¹⁵² *See The Telephone Cases*, 126 U.S. 1, 536 (1888) (“The law does not require that a discoverer or inventor, in order to get a patent for a process, must have succeeded in bringing his art to the highest degree of perfection; it is enough if he describes his method with sufficient clearness and precision to enable those skilled in the matter to understand what the process is, and if he points out some practicable way of putting it into operation.”).

¹⁵³ *Pfaff*, 525 U.S. at 66 (once an invention has been reduced to practice, this serves as the best evidence that the invention has been completed).

¹⁵⁴ *See The Telephone Cases*, 126 U.S. at 536.

¹⁵⁵ 35 U.S.C. § 111(b)(2) (2006).

¹⁵⁶ *Id.*

¹⁵⁷ 35 U.S.C. § 154 (“[A patent] grant shall be for a term beginning on the date on which the patent issues and ending 20 years from the date on which the application for the patent was filed in the United States or, if the application contains a specific reference to an earlier filed application . . . from the date on which the earliest such application was filed.”).

¹⁵⁸ *See Provisional Application for Patent*, *supra* note 145.

disclosing their invention to the public but also developing their inventions in a communal manner rather than pursuing patents. It has been suggested that if inventors elect to publish their inventions rather than seek to patent them, this will lead to a dismantled patent system in the United States.¹⁵⁹ However, this is not the case. Inventors can provide a societal benefit by publishing, or otherwise disclosing, their inventions without limiting the benefit of their innovation to a select few who can pay to license a patented invention.

The technique of publishing and filing multiple patent applications—first, a provisional and second, a non-provisional—will not provide much added benefit to an individual inventor who is unable to afford the costs associated with filing and prosecuting a patent application. Because individual inventors cannot always afford to both publish and file patent applications, rather than focusing on filing patent applications, it is more likely that they will seek to publish them as quickly as possible without seeking patent protection.¹⁶⁰ However, mere publication of an invention does not benefit an inventor who invested time, money, and effort in creating something that can be used to serve the public good.

This section advocates a users' rights system in patent law where inventors engage in crowdsourcing their inventions with the assistance of companies with the focus of allowing the public to benefit from the inventive ideas of an array of individuals. First, it explains the traditional user's rights system in copyright law and how it comports to the patent system. Second, it argues that if the concept of a U.S. patent law users' rights system is implemented with the goal of promoting societal advancement coupled with the assistance of crowdsourcing invention companies, individual inventors have a tool to fulfill the most important goal of the U.S. patent system—progress. Individual inventors' who disclose their invention to the general public, which has a right to use information readily available to them, benefits society as a whole.¹⁶¹

A. "Users" in the United States' Patent System

The promotion of progress is a common goal shared with U.S. copyright and patent laws. Just as fair use, a key concept of copyright law, promotes collective "progress" through the free use of copyrighted works, free disclosure of inventions to the general public will also work to

¹⁵⁹ Bar-Gill & Parchomovsky, *supra* note 127, at 1857–58.

¹⁶⁰ Rantanen, *supra* note 131 ("Rather than a race to invent, perhaps this will produce a race to engage in early public disclosures.")

¹⁶¹ See generally Jane C. Ginsburg, *Essay: Copyright and Intermediate Users' Rights*, 23 COLUM.-VLA J.L. & ARTS 67 (1999).

promote collective “progress.”¹⁶² In U.S. copyright law, the doctrine of fair use allows the public to copy a certain portion of a work “for limited purposes . . . notwithstanding the exclusive rights of the copyright owner.”¹⁶³

Julie E. Cohen proposed a new category of users in copyright law in 2005.¹⁶⁴ Referred to as the situated user, this user would utilize a large portion of goods that can be found in the immediate environment in various ways,¹⁶⁵ including “consumption, communication, self-development, and creative play.”¹⁶⁶ The user most relevant to the argument outlined in this Note is the situated user—her consumptive and creative play uses will result from individual inventors that elect to freely publish their inventions. Because the situated user engages in activities that will lead to progress through creative play, this user works toward fulfilling the role of patent law—progress.¹⁶⁷

B. An Argument for User’s Rights in Patent Law

The issue with the mere rush to publish inevitably lies in whether the inventor has a greater interest in obtaining a property right to exclude, even though they may be unable to use what they have invented, or whether the inventor is willing to disclose, market, and allow the public to rightfully use the invention for societal advancement. It has been argued that where the public “is getting something for nothing,” they have “misappropriated something of value.”¹⁶⁸ However, this is not the case where an inventor voluntarily chooses to disclose his invention, rather than preventing a competitor from claiming priority or using it as a hidden sword in the event that a competitor files a patent on the same or a similar invention. When an inventor willingly discloses his invention to the public, he gives the public the value he could have retained if he elected to obtain patent protection.

In addition, companies such as Quirky whose business model is based on crowdsourcing inventions, can aid inventors in reaping the benefits they invested where they cannot afford to file, prosecute, and market the invention.¹⁶⁹ As of March 2014, Quirky has gained a community of over seven hundred and forty eight inventors, with over four hundred ideas

¹⁶² U.S. CONST. art. I, § 8, cl. 8; Julie E. Cohen, *The Place of the User in Copyright Law*, 74 *FORDHAM L. REV.* 347, 372 (2005–2006).

¹⁶³ *United States v. Elcom Ltd.*, 203 F. Supp. 2d 1111, 1119 (N.D. Cal. 2002).

¹⁶⁴ Cohen, *supra* note 162, at 349, 370.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.*

¹⁶⁷ See U.S. CONST. art. I, § 8, cl. 8; Cohen, *supra* note 162, at 349.

¹⁶⁸ Ginsburg, *supra* note 161, at 69.

¹⁶⁹ *About Quirky*, QUIRKY, <https://www.quirky.com/about/> (last visited Mar. 1, 2014).

being fully developed into products. Once ideas have been fully disclosed to the public, the types of uses that will most likely result in societal advancement are consumptive and transformative.¹⁷⁰

I. Consumptive Uses

Consumptive use is one of the key types of uses that should be protected, particularly because it allows the general public to use information and technologies that are generally available to them, to fulfill their daily needs. Consumptive uses will undoubtedly be enhanced if inventors elect to publish their inventions. This concept is similar to pre-grant publication, which is based on changes that were made to United States patent law in 2000.¹⁷¹ Pre-grant publication mandates that all patent applications, with only a few exceptions, will be published eighteen months after its earliest filing date.¹⁷² This model of pre-grant publication, like the AIA and the U.S. adoption of the first-to-file patent system, was geared towards the harmonization of the U.S. patent application process with that of other countries.¹⁷³

The pre-grant publication model supports the argument that the general public should have access to information disclosed by inventors.¹⁷⁴ While pre-grant publications were adopted primarily to decrease the impact of submarine patents on innocent users of products covered by these patents,¹⁷⁵ the disclosure of inventions also shares new developments that serve as helpful guides to inventors working to improve technologies.¹⁷⁶ The American public has become increasingly dependent on the use of technology and there is a growing need for its use throughout our daily

¹⁷⁰ *Id.*

¹⁷¹ See Aimee Boss, *The Twenty-First Century Patent System Improvement Act: Is it Really An Improvement?* 32 J. MARSHALL L. REV. 725, 726 (1999).

¹⁷² See Practice Rules in Patent Cases: Publication of Applications, C.F.R. § 1.211 (2012); Boss, *supra* note 171, at 727.

¹⁷³ United States Patent and Trademark Office, *Office of Policy and International Affairs: Patent Law Harmonization*, USPTO.GOV, <http://perma.cc/53AJ-CM4V> (last updated Jan. 2012).

¹⁷⁴ Boss, *supra* note 171, at 748; *but see* Ginsburg, *supra* note 161, at 69 (“Getting something for nothing is wrongful only if the ‘something’ was subject to claims of private right.”).

¹⁷⁵ Len S. Smith, *Promoting the Progress of Science and America's Small Entity Inventors: Inventing an Improved U.S. Patent Application Publication Provision Out of the Prior Art*, 77 WASH. U. L.Q. 585, 596 (1999) (“A ‘submarine patent’ develops when a patent applicant takes advantage of the secrecy in the current U.S. patent law by retaining patent applications in pendency on broad areas of new technology for a long period of time.”); Timothy R. DeWitt, *Does Supreme Court Precedent Sink Submarine Patents?*, 38 IDEA 601, 601 (1998) (Submarine patents would “spend a decade or more as pending applications in the Patent and Trademark Office only to surface as issued patents at the height of commercial viability, wreaking havoc on well-established industries.”).

¹⁷⁶ See Deepak Hegde & Hong Luo, *Imperfect Information, Patent Publication, and the Market for Ideas* (Harvard Business School, Working Paper 14-019, Aug. 31, 2013), available at <http://perma.cc/6C9D-RNLW>.

lives.¹⁷⁷ For example, in 2013, over 20,000 new products were launched.¹⁷⁸ These products ranged from wearable wellness devices, such as bracelet watches, to fingerprint technology for phones.¹⁷⁹ The growing dependency on technology cannot be avoided or ignored. Invention disclosures fulfill the need for the public to capitalize on new technologies that increase the standard of living and make life easier.

2. Transformative Uses

The public domain, taking into consideration principles of the conservancy model,¹⁸⁰ comprises a “rich and varied assortment of intellectual and cultural building blocks, and holds . . . resources . . . [that] serve as important catalysts for creative ferment.”¹⁸¹ As such, the dissemination of information into the public domain will enable the public to use it freely in ways that improve what has already been developed. The general public’s creative use of the information disclosed about the invention leads to modifications of the original invention that will ultimately benefit society—this is referred to as transformative use.¹⁸² While there is a risk that recipients of this freely disclosed information may be “passive recipients of content,” in a society that depends on technological advancements that increase the standard of living, it is more likely that other creative individuals will capitalize on the disclosed information in order to build on it.¹⁸³

By disclosing one’s invention to the public, an inventor opens the door to transformative uses of his invention. Free disclosures, rather than seeking patents that inherently include the right to exclude all others from utilizing their inventions, allow the public to improve on what is disclosed to meet the needs of the general public, either directly or indirectly.¹⁸⁴

The improvement that occurs as a result is direct if the inventor works on improving what he disclosed. However, it is indirect if it leads other members of the general public to improve on the work disclosed by the inventor. Traditionally referred to as the “fair use” doctrine in the copyright context, the disclosure opens the door for the general public to

¹⁷⁷ Whitney Fishman, *CES 2014: A New Year, a Renewed Love of Technology for Brands of All Shapes and Sizes*, THE MAKE GOOD (Feb. 6, 2014), <http://perma.cc/U7MJ-8BGC>.

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ Andres G. Gonzalez, *Open Science: Open Source Licenses in Scientific Research*, 7 N.C.J.L. & TECH. 321, 340 (2006) (noting that “the goal of intellectual property conservancies is achieved through the offering of a wide variety of licenses to protect creative works from misuse.”).

¹⁸¹ Cohen, *supra* note 162, at 368.

¹⁸² *Id.*

¹⁸³ *Id.* at 369.

¹⁸⁴ Ginsburg, *supra* note 161, at 67.

use the information willingly disclosed by the inventor or to improve on it so that it is capable of other uses.¹⁸⁵ Such transformative uses arguably should be allowed in the United States when an inventor discloses their inventions without claiming “the exclusive right to their . . . discoveries.”¹⁸⁶

The basis of patent law protection lies in Congress seeking to “encourage inventors to share their innovations with others.”¹⁸⁷ When individual inventors disclose their inventions and allow the public to use and transform it, it promotes progress and societal advancement. The disclosure of inventive ideas to the general public is not adverse to the public interest. The disclosure leads to the overall development of society, particularly because the public will either use the information disclosed consumptively, or transform it in a manner that fulfills the growing needs of society. If either of these are the result of a disclosure, a positive result ensues because it prevents the waste of resources that will occur when others reinvent what has already been invented.¹⁸⁸ When an invention is transformed, the amount transformed by the public does not matter. What is most important is that *something more* has been added. The public should be allowed to add something to the original invention, building on the disclosed information in a manner that advances the technology disclosed and satisfies immediate societal needs.¹⁸⁹

V. CONCLUSION

A successful society depends on the resources that are available for members of the public to freely utilize. Without access to the innovations of our inventors, U.S. development would be stagnant. The interests of individual inventors cannot be adequately protected by the use of only Congressional measures.

Scholars have indicated that due to the new changes brought about by the AIA, there will be a rush to file mediocre patent applications at the USPTO. However, inventors should do the opposite—publish their inventions in lieu of filing for patent protection and work with companies such as Quirky who use crowd sourcing to fuel communal innovations. When patent applications are granted, they exclude the general public from being able to practice the invention and can restrict the advancement of

¹⁸⁵ *Id.*

¹⁸⁶ U.S. CONST. art. I, § 8, cl. 8.

¹⁸⁷ Boss, *supra* note 171, at 729.

¹⁸⁸ *Id.* (“The disclosure of inventions benefits others because it keeps people from reinventing the wheel.”) (internal quotation marks omitted).

¹⁸⁹ *But see* Ginsburg, *supra* note 161, at 73 (noting that in the copyright context traditional fair use principles will not prevail in situations where the user uses a work in its entirety and does not add anything new to the primary work).

that technology. The ultimate goal of U.S. patent laws is progress. By recognizing a new type of users' rights in patent law, and publishing, coupled with communal innovation, this goal can be realized. Once individual inventors disclose their inventions in a manner that relinquishes their right to exclude the public from using it, they benefit the largest users of inventions—the public. Members of the public can then use the information disclosed in ways that will immediately improve their current lifestyle. They can also build on the information disclosed in transformative ways that will benefit society. Inventors and the patent community should recognize that the general public has a fundamental right in utilizing disclosed information to promote progress.