Idaho Law Review

Volume 50 | Number 1 Article 8

April 2014

America Invents Act: How It Affects Small Businesses

Eric P. Vandenburg

AMERICA INVENTS ACT: HOW IT AFFECTS SMALL BUSINESSES

TABLE OF CONTENTS

I. INTRODUCTION

> *If nature has made any one thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as long as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it.*
>
> Thomas Jefferson[1]

On September 16, 2011, the *Leahy-Smith America Invents Act* (AIA) was signed into law, bringing with it what many consider the most significant change to the Patent Act since 1952.[2] While the Act brings about many changes to the current patent law system, the most substantial change is the demise of what has been long seen as the uniquely American approach to patent law—the "first-to-invent" system of patent priority.[3] This bipartisan bill, which effectively switched America's patent

---

1. THOMAS JEFFERSON, *Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813)*, *in* 13 THE WRITINGS OF THOMAS JEFFERSON 326, 333 (Albert Ellery Bergh ed., 1907), *available at* https://www.archive.org/stream/writingsofthomas1314jeff#page/n9/mode/2up.

2. Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) ("An Act To amend title 35, United States Code, to provide for patent reform.").

3. *See id.* at § 3; *see also* Gerald J. Mossinghoff & Vivian S. Kuo, *World Patent System Circa 20XX, A.D.*, 38 IDEA: J.L. & TECH. 529, 548 n.38 (1998) ("At the end of 1997, there were two nations that used the so-called first-to-invent system: the United States and the Philippines. Effective January 1, 1998,

system from "first-to-invent" (FTI) to "first-to-file" (FTF), has created a broad divide in our country, one that transgresses even political party allegiances, between those who tout the efficiency and global patent harmonization that comes with FTF and those who strongly oppose FTF, arguing that it is unconstitutional.[4]

Detractors primarily attack the constitutionality of the FTF system by alleging that Congress exceeded its mandate when it passed the Act.[5] In fact, parties had already challenged the constitutionality of the AIA during the eighteen-month period before its effective date of March 16, 2013.[6] The FTI advocates support their argument by looking to the history and tradition of United States patent law, which awards patents to the "first and true inventor."[7] They argue that not only is Congress contravening the long history of U.S. patent law by awarding patents to the filer, but this would also arguably violate the intent of the framers of the Constitution.[8]

On the other hand, proponents of FTF interpret the framers' intent another way and argue that there is no express language written in the constitution that requires the patent be given to the first inventor, as opposed to any inventor.[9] They bolster this argument by suggesting that the first-to-file system would actually be more effective at carrying out the purpose of the patent clause, to grant an incentive for inventors who promptly file their patent so the public may benefit from the disclosure, by "promot[ing] rapidity of public disclosure."[10]

While there is no doubt that keeping Congress within its mandated powers is the primary reason for challenging the constitutionality of the AIA, there is also a very important policy reason to challenge the AIA: the negative impact a weakened grace period will have on startups, small businesses, and individual inventors.[11] Preventing this negative impact on small businesses and inventors is of the utmost importance because "[s]mall businesses are the backbone of the U.S. economy[] and the primary source of jobs for Americans."[12] The change from first-to-invent to

---

under its Republic Act No. 8293, the Philippines adopted a first-to-file system, leaving the United States alone in the world in adhering to a first-to-invent system.").

4. Under the current U.S. patent priority system, patent rights are awarded to the person who can show he or she was the first to invent the idea in question regardless of who filed first with the patent office. Under the first-to-file system, it does not matter who was the first to invent. Rather, whichever person is fastest in writing an application and submitting it to the patent office gets the patent rights. Doug Harvey, *Reinventing the U.S. Patent System: A Discussion of Patent Reform Through an Analysis of the Proposed Patent Reform Act of 2005*, 38 TEX. TECH L. REV. 1133, 1136–37 (2006).

5. *Id.* at 1143–44.

6. Madstad Eng'g, Inc. v. U.S. Patent & Trademark Office, No. 8:12–cv–1589–T–23MAP, 2013 WL 3155280 (M.D. Fla. May 8, 2013) (filed July 18, 2012); *see* Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 3(n), 125 Stat. 284, 293 (2011).

7. Patent Act of 1790, ch. 7, 1 Stat. 109-112 (1790), *available at* http://www.ipmall.info/hosted_resources/lipa/patents/Patent_Act_of_1790.pdf ("An act to promote the progress of useful Arts") (repealed 1973).

8. Harvey, *supra* note 4, at 1144.

9. *First-to-File v. First-to-Invent: A Bone of Contention in the International Harmonization of U.S. Patent Law*, SHELDON MAK ROSE & ANDERSON, http://www.usip.com/pdf/Article_Patents/1st2fil.pdf (last visited Nov. 25, 2013).

10. *Id.*

11. Jennifer L. Case, *How the America Invents Act Hurts American Inventors and Weakens Incentives to Innovate*, 82 UMKC L. REV. 29, 72 (2013).

12. *Small Business*, OFF. OF THE U.S. TRADE REPRESENTATIVE, http://www.ustr.gov/trade-topics/small-business (last visited Nov. 25, 2013).

first-to-file gives large corporations, which have more resources such as in house counsel and available capital, an advantage because it is easier for a large corporation to file a patent application before an individual inventor, even if the large corporation is not the first inventor.[13]

This article focuses on the changes the AIA brings to the patent industry and the effects it will have on small businesses and inventors. In particular, this article emphasizes how the changes will disadvantage these small entities and advantage the large corporations. Part II provides a history of patent law in the U.S..[14] Specifically, it follows the consistent definition of who is an "inventor" under the U.S. Constitution.[15] Part III compares the language of the current patent system and the new system under the AIA.[16] This analysis is narrowed specifically to language changing to a first-to-file system and the arguments for and against the switch from first-to-file.[17] Part IV analyzes the harmful effects that the AIA will have on small companies and inventors regarding the first-to-file provision.[18] Finally, Part V will conclude and suggest ways that small companies and inventors can mitigate the likely harm they are going to experience.[19]

II. HISTORICAL BACKGROUND OF U.S. PATENT LAW

A. Constitutional Authority for Awarding Patent Rights

> *Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.*
>
> United States Constitution.[20]

By their very nature, ideas, as Thomas Jefferson noted, "freely spread from one to another . . . incapable of confinement or exclusive appropriation."[21] Thus, because inventions are ideas, they "cannot, in nature, be a subject of property."[22]

13. Letter from Todd O. McCracken, President, Nat'l Small Bus. Ass'n to Susy Tsang-Foster, Legal Advisor, Office of Patent Legal Admin. U.S. Patent & Trademark Office (Oct. 5, 2012), *available at* http://www.uspto.gov/patents/law/comments/nsba_20121005.pdf ("By repealing the invention date as the priority date, compared to prior art, the AIA will dramatically increase the pressure on small businesses to establish filing date priority and require them to file more frequently and at every stage of development without the opportunity to perfect their inventions. The costs of these filings (including the hiring of patent attorneys, new patenting costs, etc.) and the considerable amount of time involved with more frequent invention reviews, preparation and related filings will be felt most strongly by the small business community. Large, multinational corporations have the resources to file more applications quicker and earlier in the development process and will have a disproportionate advantage over their independent and smaller counterparts. The implementation of this rule will deliver a critical blow to small-business patentees and place them at a significant disadvantage in the patenting process.").

14. *See infra* part II.

15. *See infra* part II.

16. *See infra* part III.

17. *See infra* part III.

18. *See infra* part IV.

19. *See infra* part V.

20. U.S. CONST. art. I, § 8, cl. 8.

21. Jefferson, *supra* note 1, at 334.

22. *Id.*

Therefore, society must set up a system to "give an exclusive right to the profits arising from them, as an encouragement to men to pursue ideas which may produce utility" for the benefit of society.[23] While other nations thought that "these monopolies produce more embarrassment than advantage to society," our founders thought that this *quid pro quo* system of exclusive rights in ideas in exchange for public disclosure was important enough to include in the Constitution.[24] Now, the U.S. Constitution gives Congress the power to grant exclusive rights to inventors for their discoveries.[25]

Importantly, under this *quid pro quo* system of awarding patents, the "reward to the owner [is] a secondary consideration."[26] Rather, the primary policy reason for granting patents "is to bring new designs and technologies into the public domain through disclosure."[27] While there is a rich history of legislation and case law on various aspects of the patent clause, such as what temporal period qualifies as "limited times,"[28] the strand of case law and legislative history this section of the article is concerned with is the question of who is an "inventor"?

B. Historical Overview on U.S. Patent Law: Who Is an "Inventor"?

> *Given that historically the inventor has been viewed as first to create, then such tradition may suggest a constitutionally rooted requirement that would preclude a first to file system and thus thwart harmonization efforts.*
>
> Timothy R. Holbrook[29]

The beginning of understanding U.S. patent law, understandably, comes from looking to English patent law at the time of the construction of the U.S. Constitution.[30] However, it is the English law's flaws that inspired America's patent system. English common law did not recognize property rights in the mind-work of the inventor.[31] Patents were simply viewed as "a grant" issuing solely from "royal favor" rather than the property in the inventor's intellectual labor.[32] This is commonly referred to as the distinction between a "societal right," or one given by some authority, versus a "moral right," or one earned through mental labor and work.

---

23. *Id.*
24. *Id.*
25. U.S. CONST. art. I, § 8, cl. 8.
26. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984).
27. Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 151 (1989).
28. *See* 35 U.S.C. § 154(a)(2) (2012) (amending the term of patent protection from 17 years to 20 years); *see also* Eldred v. Ashcroft, 537 U.S. 186, 208 (2003) (holding that Congress did not exceed its mandated power by setting the "limited time" period for copyrights at seventy years).
29. Timothy R. Holbrook, *The Treaty Power and the Patent Clause: Are There Limits on the United States' Ability to Harmonize?*, 22 CARDOZO ARTS & ENT. L.J. 1, 8 (2004) (Timothy Holbrook is an assistant Professor of Law at Chicago-Kent College of Law and this article was presented at the symposium entitled Patent Law, Social Policy, and Public Interest: The Search for a Balanced Global Patent System, hosted by the Benjamin N. Cardozo School of Law).
30. Edward C. Waltershceid, *The Early Evolution of the United States Patent Law: Antecedents (Part 1)*, 76 J. PAT. & TRADEMARK OFF. SOC'Y 697, 699 (1994) ("It is not surprising that the United States in developing its own law pertaining to property right in invention should look to the law pertaining to the patent privilege in England.").
31. McKeever v. United States, 14 Ct. Cl. 396, 418 (1878).
32. *Id.* at 420.

While English law applied the "societal right" in patents, the U.S. law, on the contrary, recognizes in the clearest terms the mind-work that we term inventions.[33] Thus, this adoption of "moral rights" being grounds for patent issuance and securing to inventors exclusive rights, while founded on English common law, is in many ways uniquely American.[34] As Daniel Webster stated while in the House of Representatives in 1824, "the right of the inventor" is "the fruit of his mind—it belongs to him more than any other property—he does not inherit it—he takes it by no man's gift—it peculiarly belongs to him, and he ought to be protected in the enjoyment of it."[35] Moreover, not only did England not give moral rights in patents, but essentially no other European patent practices or laws were known to those responsible for creating the first patent law of the U.S.[36] Therefore, the framers of the Constitution created a uniquely American patent law system by rejecting the common law of England and all of Europe by awarding patent rights to the *inventor's* mind-work rather than societal awards to the royally favored.

Not only was the Constitution written to give the inventor rights in patents, but in 1790, Congress enacted the first patent act, which authorized patents for any person who "invented or discovered any useful art, manufacture, engine, machine, or device . . . *not before known or used*."[37] While Congress amended this Act in 1793, the pertinent language regarding an inventor did not materially change.[38] This language is consistent with the definition of an "invent[o]r" at that time: "[o]ne who produces something new; a devi[s]er of [s]omething *not known before*."[39] The language used in these statutes and the understood definition of an inventor during the drafting of these statutes clearly shows that an inventor must make a genuine discovery, and not simply win a race to file at the patent office. Further support regarding what constitutes an inventor can be found in the provision providing for a repeal of a patent if "it shall appear that the patentee was not the *first and true inventor or discoverer*."[40] Thus, the language of the original Patent Acts supports the first-to-invent system as the only constitutionally allowed system in the U. S. because only the first and true inventor can gain patent rights.

While there has been subsequent legislation amending the original Patent Acts of 1790 and 1793, none of this legislation affected the language that gives inventors the right to their inventions.[41] In 1836, Congress passed legislation that reformed patent law by establishing the U.S. Patent Office to review patents instead

33. *Id.*
34. Walterscheid, *supra* note 30, at 698.
35. 41 ANNALS OF CONG. 934 (1824).
36. Walterscheid, *supra* note 30, at 698.
37. Patent Act of 1790, ch. 7, § 1, 1 Stat. 109 (1790) (emphasis added) ("An Act to promote the progress of the useful Arts") (capitalization as in original).
38. Patent Act of 1973, ch. 11, § 1, 1 Stat. 318 (1793) ("An act to promote the progress of useful Arts; and to repeal the act heretofore made for that purpose"). The language regarding an inventor simply changed to "not known or used before.").
39. *See generally* John Walker, A CRITICAL PRONOUNCING DICTIONARY (R.C. Alston) (1791) (emphasis added).
40. Patent Act of 1973, ch. 7, § 5, 1 Stat. 109 (emphasis added).
41. Bd. of Trs. of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 131 S. Ct. 2188, 2194 (2011) ("Although much in intellectual property law has changed in the 220 years since the first Patent Act, the basic idea that inventors have the right to patent their inventions has not.").

of courts, instituting the "novelty" requirement for patents, codifying the statutory bars, and clarifying the law for cases of conflicting patents.[42] However, this legislation had no effect on the language defining an inventor.[43] The next laws regarding patents were passed in 1839 and created a grace period of two years for publication or use of the invention by the inventor before filing the application.[44] However, this was later shortened to a one-year grace period in 1939, which is what the grace period still is today.[45] The most recent patent law overhaul occurred in 1952, and while it made many slight changes to the law, the two major changes made require that an invention be nonobvious to a person having ordinary skill in the art and to codify a definition and penalties for infringement.[46] Thus, while Congress has passed much legislation regarding patent law in the U.S. since the Patent Acts of 1790 and 1793, none of this legislation has changed the tenet that original inventors have the exclusive right to patent their respective inventions.[47]

Additionally, judicial support for the definition of inventor as the first-to-invent can be found in the courts' historical construction of the word.[48] As early as the beginning of the nineteenth century, courts held that the property right in an invention vested in the inventor "from the moment of invention" and the process of obtaining a patent "only perfected" that right.[49] As a district court judge said in 1826, "[i]t is very true that 'the right to a patent belongs to him who is the first inventor, even before the patent is granted.' That is, none but the first inventor can have a patent."[50] As these district court decisions show, the patent is simply a formal step one must make to publish their rights in their invention and subsequently benefit from a right to exclude others from using the invention. Even the Supreme Court adopted this view of patent law, that "the right is created by the *invention*, and not by the *patent*."[51] This viewpoint of rights to an invention vesting in the first inventor, and not the first filer, is a recurring theme throughout the Supreme Court's holdings.[52] The Supreme Court recently affirmed this history of patents

42. *A Brief History of the Patent Law of The United States*, LADAS & PARRY LLP, http://www.ladas.com/Patents/USPatentHistory.html (last visited Nov. 11, 2013).

43. *Id.*

44. Patent Act of 1839, ch. 88, § 7, 5 Stat. 353 (1839) ("An act in addition to An act to promote the progress of the useful arts").

45. Patent Act of 1939, ch. 450, § 1, 53 Stat. 1212 (1939) ("An act to amend sections 4886, 4887, 4920, and 4929 of the Revised Statutes, (U.S.C., title 35, secs. 31, 32, 69, and 73)").

46. Patent Act of 1952, ch. 950, 66 Stat. 792 (1952) ("An act to revise and codify the laws relating to patents and the Patent Office, and to enact into law title 35 of the United States Code entitled Patents").

47. Bd. of Trs. of Leland Stanford Junior Univ., 131 S. Ct. at 2194–95.

48. *See id.* at 2190 ("Since 1790, the patent law has operated on the premise that rights in an invention belong to the inventor." *Id.*).

49. Evans v. Jordan, 8 F. Cas. 872, 873 (C.C.D. Va. 1813), *aff'd*, 13 U.S. 199 (1815).

50. Thompson v. Haight, 23 F. Cas. 1040, 1048 (C.C.S.D.N.Y. 1826).

51. Pennock v. Dialogue, 27 U.S. 1, 7 (1829) (emphasis in original).

52. *See* Shaw v. Cooper, 32 U.S. 292, 319 (1833) (holding that "it clearly appears, that it was the intention of the legislature, by a compliance with the requisites of the law, to vest the exclusive right in the inventor only."); Gayler v. Wilder, 51 U.S. (10 How.) 477, 493 (1850) ("[T]he discoverer of a new and useful improvement is vested by law with an inchoate right to its exclusive use, which he may perfect and make absolute by proceeding in the manner which the law requires."); Solomons v. United States, 137 U.S. 342, 346 (1890) ("[W]hatever invention [an inventor] may thus conceive and perfect is his individual property."); United States v. Dubilier Condenser Corp., 289 U.S. 178, 188 (1933) (noting that an inventor owns "the result of an inventive act, the birth of an idea . . . the product of original thought . . .").

rights vesting to the first inventor in 2011 by acknowledging that their "precedents confirm the general rule that rights in an invention belong to the inventor."[53]

As over two centuries of court decisions and legislative language demonstrate, the Constitution defines an inventor as the first to discover rather than first to file; and thus, the Constitution requires a first-to-invent rather than a first-to-file system.[54] In light of this consistent legislative language and court interpretations, it is clear that the grant of exclusive rights is one given to the individual who is the true and first inventor, and any first-to-file system flies in the face of what the Constitution mandates.[55] Not only does this long history suggest a constitutional bar against a first-to-file system, but "the lack of historical precedent for [Congress's action]" with respect to the reciprocal viewpoint is also arguably "the most telling indication of the severe constitutional problem."[56] Thus, legislative history and over 200 years of courts' interpretation strongly suggests that the Constitution requires a first-to-invent system rather than a first-to-file scheme.

III. THE AIA: FIRST-TO-INVENT VERSUS FIRST-TO-FILE

A. Pertinent Provisions Undergoing Change

In shifting from a first-to-invent to a first-to-file system, the America Invents Act contradicts both the text and the historical understanding of the Copyright and Patent Clause in the Constitution.

Adam Mossoff[57]

As previously discussed, the AIA is making sweeping changes to the current American patent law system by switching from the long followed first-to-invent system to the first-to-file system of awarding priority rights in patent applications.[58] This change should harmonize the U.S. patent system with global patent systems.[59]

---

53. Bd. of Trs. of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 131 S. Ct. 2188, 2195 (2011).

54. Timothy R. Holbrook, *The Treaty Power and the Patent Clause: Are There Limits on the United States' Ability to Harmonize?*, 22 CARDOZO ARTS & ENT. L.J. 1, 8 (2004) ("Given that historically the inventor has been viewed as first to create, then such tradition may suggest a constitutionally rooted requirement that would preclude a first to file system and thus thwart harmonization . . . .").

55. Michael A. Glenn & Peter J. Nagle, *Article I and the First Inventor to File: Patent Reform or Doublespeak?*, 50 IDEA 441, 461–462. (2010) ("It is clear that the patent grant was never intended to be a race to the U.S. patent office, a race in which the legions of fleet-footed lawyers in the pay of powerful market forces are sure to win. The Article I grant is an individual right granted to the true and first inventor and the Constitution does not support a tortured interpretation urged by proponents of a first inventor to file system.").

56. Free Enter. Fund v. Pub. Co. Accounting Oversight Bd., 130 S. Ct. 3138, 3159 (2010) (quoting Free Enter. Fund v. Pub. Co. Accounting Oversight Bd., 537 F. 3d 667, 669 (2008) (Kavanaugh, J. dissenting)).

57. Adam Mossoff, *The First-to-File Provision in H.R. 1249 is Unconstitutional: A Textual and Historical Analysis*, LAW.ASU.EDU, 3 (2011) http://homepages.law.asu.edu/~dkarjala/Patent/MossoffHR1249Unconstitutional(2011).pdf.

58. *See* 157 CONG. REC. H4423 (daily ed. June 22, 2011) (statement of Rep. Dana Rohrabacher).

59. *See id.*

Prior to the passing of the AIA, the Patent Act explicitly awarded rights in an invention to the first inventor by stating:

> A person shall be entitled to a patent unless—
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, *before the invention* thereof by the applicant for patent, or…
>
> (f) he did not himself invent the subject matter sought to be patented, or
>
> (g)(1) during the course of an interference conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that *before such person's invention* thereof the invention was made by such other inventor and not abandoned, suppressed, or concealed, or (2) *before such person's invention thereof*, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.[60]

Courts have consistently interpreted this language in the Patent Act to give priority of invention "to the first party to [1] reduce an invention to practice unless [2] the other party can show that it was the first to conceive of the invention and that it exercised reasonable diligence in later reducing that invention to practice."[61] However, Section 3 of the AIA not only deletes Section 102(f) and (g) regarding priority, but also changes the language of Section 102(a) of the Patent Act to award the first filer by changing the language to the following:

> A person shall be entitled to a patent unless—
>
> (1) the claimed invention 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; or
>
> (2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed *before the effective filing date* of the claimed invention.[62]

As the language of Section 3 of the AIA shows, all references to the invention date in the Patent Act of 1952 have now been removed and effectively replaced with a focus on the effective filing date.[63] Thus, any patent application filed after the effective date of March 16, 2013 is now given a priority date of its filing date,

60. 35 U.S.C. §§ 102(a), (f), (g) (2012) (current version at 35 U.S.C. § 102 (West 2013)) (emphasis added).

61. Cooper v. Goldfarb, 154 F.3d 1321, 1327 (Fed. Cir. 1998).

62. Leahy-Smith America Invents Act, *supra* note 2, §3, at 285–86 (emphasis added).

63. Daniel J. Sherwinter & Patrick M. Boucher, *The America Invents Act*, 41 COLO. LAW. 47, 49–50 (2012).

and priority between conflicting applications is now determined by the filing date rather than the invention date.[64] However, before this occurs, the AIA must first pass the test presented by pending cases that challenge the constitutionality of the first-to-file scheme and examine the various legal and policy driven arguments on both sides of the divide.[65]

B. Challenges to America Invents Act

1. Policy Driven Arguments

The main reason, purpose, and motivation the proponents of the AIA have for passing the legislation "is to harmonize our law, American patent law, with Europe."[66] The reason international harmonization in patent law is so attractive is to "simplify and expedite an inventor's ability to obtain worldwide patent protection" and strengthen that protection.[67] Additionally, this harmonization will allegedly reduce costs of applying for, defending, and enforcing patents internationally, and will simplify the patent rules.[68] However, opponents of the AIA view this "harmonization" as another word for "succumbing to peer pressure" and wonder why, if American law has always been stronger in this area, we must harmonize or weaken our patent system.[69] Indeed, the argument that this harmonization will weaken our patent system finds strength in the statement made by the European Union in 2011 regarding how it is facing an "innovation emergency" in science and industry and is still trailing far behind the U.S.[70] While there is no doubt that this international harmonization "will be more beneficial to large, multinational corporations," it does not necessarily follow that this harmonization will be better for the American innovation and patent industry.[71]

Another frequently used argument in favor of passing the AIA and a first-to-file system is to simplify the complex system in place for interference proceedings.[72] An interference proceeding, under the former system, is where the Board of Patent Appeals and Interferences determines questions of priority for conflicting patent applications and subsequently issues a patent to the applicant who is adjudged the prior inventor.[73] As Congressman Smith, one of the co-sponsors of the

64. See *id.*

65. *See, e.g.*, Madstad Eng'g, Inc. v. U.S. Patent & Trademark Office, No. 8:12–cv–1589–T–23MAP, 2013 WL 3155280 (M.D. Fla. May 8, 2013).

66. 157 Cong. Rec. H4423 (daily ed. June 22, 2011) (statement of Rep. Dana Rohrabacher).

67. Vito J. DeBari, *International Harmonization of Patent Law: A Proposed Solution to the United States' First-to-File Debate*, 16 FORDHAM INT'L L.J. 687, 692 (1993).

68. *Id.* at 693.

69. Gary M. Lauder, *Patently Absurd or: How to Go From the World's Best Patent System to Worst-Than-Most in a Single Step*, HUFFINGTON POST (Mar. 7, 2011), http://www.huffingtonpost.com/gary-lauder/patently-absurd-or-how-to_b_832703.html [hereinafter *Patently Absurd*]; 157 CONG. REC. H4423 (daily ed. June 22, 2011) (statement of Rep. Dana Rohrabacher).

70. Raf Casert, *EU Warns It Lags Behind in Global Innovation Race*, SEATTLE TIMES, Feb 1, 2011, http://seattletimes.com/html/businesstechnology/2014097347_apeueuinnovation.html.

71. 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, 765 (2006).

72. *See* 157 Cong. Rec. H4421 (daily ed. June 22, 2011) (statement of Rep. Lamar Smith).

73. *See* 35 U.S.C. § 135(a) (2012) (current version at 35 U.S.C. §135(a) (West 2013)).

Leahy-Smith America Invents Act, put it: "the current system lulls inventors into a false sense of security based on the belief that they can readily and easily rely on being the first-to-invent," but these inventors forget "they must comply with the complex legal procedures…" to win an interference proceeding.[74] Congressman Smith argues that the former patent system's costly and complex process truly hurts small inventors because they commonly lose their patent rights in these expensive battles over ownership.[75] In support of these claims, he stated that "[i]n the last 7 years…only one independent inventor out of 3 million patent applications has proved an earlier date of invention over the inventor who filed first."[76]

While this may be true, comparing the amount of number of successful interference contests with the number of patents issued does not accurately depict the small inventor's chances of winning an interference. When considering just interference contests, research shows that roughly 40% of these small parties did in fact beat the larger parties.[77] Indeed, this research suggests that small entities neither gain nor lose on average from using the interference system.[78] Thus, while parties may not often challenge priority, actual litigation statistics show that when priority is challenged, the smaller inventor does not have a disadvantage in the priority proceedings.[79]

Proponents of the bill also claim that first-to-file will "simplify the patent application system and provide increased certainty to businesses that they can commercialize a patent that has been granted."[80] This certainty is accomplished because once a patent is issued, the inventor no longer has to worry about priority and can simply rely on the first filing date and move forward, which will allegedly help "raise capital, grow businesses, and create jobs."[81] While this may be true, there is too large an emphasis placed on this argument. Though this argument trumpets saving "significant time and money" on these disputes, it fails to account for the

74. 157 CONG. REC. H4421 (daily ed. June 22, 2011) (statement of Rep. Lamar Smith).
75. *Id.*
76. *Id.*
77. *See* Mark T. Banner & John J. McDonnell, *First-to-file, Mandatory Reexamination, and Mandatory "Exceptional Circumstance": Ideas for Better? Or Worse?*, 69 J. PAT. & TRADEMARK OFF. SOC'Y 595, 602 (1987) ("Thus, considering all of the statistics concerning Board decisions as a whole, priority was awarded to the junior party, in whole or in part, in 42.7 percent of the cases."); Mark A. Lemley & Colleen V. Chien, *Are the U.S. Patent Priority Rules Really Necessary?*, 54 HASTINGS L.J. 1299, 1309 (2003).
78. *See* Banner & McDonnell, *supra* note 77, at 602; Lemley & Chien, *supra* note 77, at 1309.
79. Gerald J. Mossinghoff, *The U.S. First-to-Invent System Has Provided No Advantage to Small Entities*, 84 J. PAT. & TRADEMARK OFF. SOC'Y 425, 430 (2002).

TABLE 6. Small Entities Advantaged and Disadvantaged by the First-to-Invent System FY 1983-2000

Small Entities	Advantaged	Disadvantaged
Independent Inventors	98	115
Small Businesses	83	75
Nonprofit Institutions	22	11
Total	203	201

80. 157 CONG. REC. S1089-01 (daily ed. Mar. 2, 2011) (Statement of Sen. Patrick Leahy).
81. *Id.*

reality that "the percentage of patent applications that involve a priority dispute is quite small."[82] Thus, because there are such a small amount of priority disputes, the amount of time and money spent on them cannot be that significant; yet the value of having priority disputes can be invaluable for parties who can show priority. Although there are only a small number of priority disputes, it is unreasonable to do away with priority disputes just for the sake of clarity. That would be along the same lines of an argument that, because there are only a small number of infringement cases, they are unimportant as well.[83] Therefore, although patent priority suits may be costly, the small amount of them does not make that argument as significant as AIA proponents would like to think it is. The loss in having the option to litigate patent priority suits would in fact be a bigger loss than any loss seen in money and time spent on these proceedings because the option of having priority disputes available is more important in "determining who gets a patent."[84]

On the other side of the argument regarding the passing of the AIA is the interesting notion that giving the first filer priority may create patent applications that are incomplete or poorly drafted in order to be the first filer. The importance of this argument stems from the idea that an efficient patent system depends on the amount and quality of its patents.[85] Under the first-to-file system, the number of applications and speed in which these applications are filed will increase substantially while the quality of these patents will decrease.[86] For example, the Japanese first-to-file patent system has over five times as many applications filed annually than does the U.S. system.[87] While other factors could explain this difference in number of applications, the first-to-file standard is certainly a significant factor. The large number of applications filed in Japan and the corresponding decline in patent application quality demonstrate what could be in store for America under a first-to-file system.[88] Subsequently, practicing lawyers "fear that this decline in quality will have a detrimental effect on future scientific development."[89]

Perhaps the strongest argument against the first-to-file provision of the AIA is the negative effects of the "race to the office" on small inventors and businesses. As small businesses stated in a letter to the Legal Advisor of the U.S. Patent and Trademark Office (USPTO):

---

82. Lemley & Chien, *supra* note 77, at 1331.

83. Lemley & Chien, *supra* note 77, at 1331. Indeed, "[t]he data suggests that interferences are litigated to judgment in about the same percentage of applications as infringement suits are litigated to judgment once a patent issues." *Id.* at 1308. Thus, "[o]ne cannot say that the small number of priority disputes does not matter anymore than one would argue that litigated cases of infringement do not matter to the patent system." *Id.* at 1331; *see also* Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1501 (2001).

84. Lemley & Chien, *supra* note 77, at 1331.

85. Charles R.B. Macedo, Note, *First-to-File: Is American Adoption of the International Standard in Patent Law Worth the Price?*, 1988 COLUM. BUS. L. REV. 543, 573–74 (1988) ("The efficiency of any system depends upon the quantity and quality of the applications filed.").

86. *Id.* at 573 ("Under a first-to-file system, it would become even more important for an inventor to establish a priority date by quickly filing an application. Thus, practitioners predict that the number of applications filed at [the] Patent Office would increase in quantity and decrease in quality under a first-to-file system.").

87. *Id.*

88. *Id.*

89. *Id.*

> By repealing the invention date as the priority date, compared to prior art, the AIA will dramatically increase the pressure on small businesses to establish filing date priority and require them to file more frequently and at every stage of development without the opportunity to perfect their inventions. The costs of these filings . . . and the considerable amount of time involved with more frequent invention reviews, preparation and related filings will be felt most strongly by the small business community. Large, multinational corporations have the resources to file more applications quicker and earlier in the development process and will have a disproportionate advantage over their independent and smaller counterparts. The implementation of this rule will deliver a critical blow to small-business patentees and place them at a significant disadvantage in the patenting process.[90]

This argument, while certainly worth mentioning and briefly describing here, will be addressed in full detail later in this article.[91]

In conclusion, the policy arguments in favor of switching to a first-to-file system seem to favor one group of people: large corporations. Indeed, large international corporations benefit from harmonizing the U.S. patent system with the global patent systems and removing interference provisions to award patent rights to the company that can most quickly file patents. However, not only will the race to the patent office likely reduce the quality of patents awarded, but it will also significantly disfavor small businesses as will be discussed.[92] Finally, the strongest argument against the passing of the America Invents Act is the constitutionality of having a first-to-file system.[93]

2. Constitutionality Arguments

The Patents and Copyrights clause located in Article 1, section 8 of the United States Constitution is "both a grant of power and a limitation."[94] However, Congress may not "overreach the restraints imposed by the stated constitutional purpose," and it cannot enlarge the monopoly "without regard to innovation, advancement or social benefit gained thereby."[95] However, the AIA seeks to overreach those restraints by ignoring the fact that "inventor means first inventor in the Constitution."[96] As recent as 2011, none other than the Chief Justice of the United States Supreme Court, John Roberts, stated that "[s]ince 1790, the patent law has operated on the premise that *rights in an invention belong to the inventor*," and that "[a]lthough much in intellectual property law has changed in the 220 years since the first Patent Act, the basic idea that *inventors* have the right to patent *their inven-*

90. McCracken, *supra* note 13, at 3 ("The National Small Business Association (NSBA) is the nation's older nonpartisan small business advocacy organization, with more than 65,000 small business member in virtually every industry across the country.").

91. *See infra* Part IV.

92. *See infra* Part IV.

93. *See supra* Part I.A–B; *infra* Part III.B.2.

94. Graham v. John Deere Co., 383 U.S. 1, 5 (1966).

95. *Id.* at 5–6.

96. 157 CONG. REC. H4422 (daily ed. June 22, 2011) (statement of Rep. Jim Sensenbrenner).

tions has not."[97] The AIA implements language[98] inconsistent with both the long history of awarding rights to the first and only inventor[99] and the idea that the rights protected by our patent system are pre-existing rights.

Proponents of the America Invents Act argue that the first-to-file provision is constitutional because an applicant still must be a "bona fide inventor to qualify" for patent rights.[100] Suggesting that by requiring that an applicant be a bona fide inventor, the AIA establishes a "first-inventor-to-file" standard and will not simply allow an applicant to steal an invention.[101] These proponents argue that the first-inventor-to-file system fits within the constitution's meaning because it requires any subsequent inventor "to have come up with the idea independently and separately."[102]

However, not only is the first-inventor-to-file justification inconsistent with over 200 years of law,[103] but it also flies in the face of the actual text of the Patents Clause. The Patents Clause expressly states that it promotes the progress of science and useful arts by "*securing* for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."[104] This language of "securing" inventors rights to their respective "discoveries" suggests that the right is *a pre-existing* right that a patent ensures, and not a right that is *granted* by the patent. In 1972, Joseph Barnes explained in one of the earliest treatises on patents how pre-existing rights exist under the language of *securing*:

> [A] system for securing property in the products of genius is a mutual contract between the inventor and the public, in which the inventor agrees, on proviso that the public will secure to him his property in, and the exclusive use of his discovery for a limited time, he will, at the expiration of such time, cede his right in the same to the public . . . .[105]

Additional support for this strict textualist view of the Patent Clause comes from the fact that the drafters of the Constitution were former British subjects.[106] Under the English Crown in the sixteenth and seventeenth centuries, the courts made a practice of granting monopolies to "court favorites in goods or businesses which had long before been enjoyed by the public."[107] Looking at the drafters of

---

97. Bd. Of Trs. of Leland Stanford Junior Univ. v. Roche Molecular Sys., Inc., 131 S. Ct. 2188, 2192–94 (2011) (emphasis added).

98. *See supra* Part III.A.

99. *See supra* Part II.B.

100. 157 CONG. REC. H4422 (daily ed. June 22, 2011) (statement of Rep. Bob Goodlatte).

101. *Id.*

102. *Id.* at H4423.

103. *See supra* Part II.B.

104. U.S. CONST. art. I, § 8, cl. 8 (emphasis added).

105. Jonathan S. Massey, *Why First To File Is Unconstitutional*, *in* WHY H.R. 1249 IS UNCONSTITUTIONAL 1, *available at* http://docs.piausa.org/112th-Congress%20(2011-2012)/Why%20H.R.%201249%20is%20Unconstitutional.pdf (emphasis omitted) (last visited Nov. 25, 2013). Interestingly, Jonathan Massey is the attorney for the recently dismissed case challenging the constitutionality of the AIA in *Madstad Eng'g, Inc. v. U.S. Patent & Trademark Office*, No. 8:12–cv–1589–T–23MAP, 2013 WL 3155280 (M.D. Fla. May 8, 2013).

106. Adam J. Sedia, *Storming the Last Bastion: The Patent Reform Act of 2007 and Its Assault on the Superior First-to-Invent Rule*, 18 DEPAUL J. ART, TECH. & INTELL. PROP. L. 79, 118 (2007).

107. Graham v. John Deere Co., 383 U.S. 1, 5 (1966).

the Constitution and their desire to end monopoly granting in established products, it is clear that they chose the language "securing" to show that the rights do in fact vest upon the inventing, and not the granting, of the patent as the AIA implements.[108] Thus, when viewing the text of the Patent Clause and its drafters' historical background, it is clear that the strict textualist approach of those who "view the first-to-file system as unconstitutional appear to have the better argument."[109]

In contrast, proponents of the first-to-file system also look to judicial precedent to argue that U.S. courts have long recognized that a second inventor may be awarded a patent under certain circumstances.[110] The first Supreme Court case to award patent rights to a second inventor was *Gayler v. Wilder* in 1850.[111] There, the Court gave the patent rights to the second inventor because the first inventor had not made his idea public.[112] The Court held that "by knowledge and use the legislature meant knowledge and use existing in a manner accessible to the public."[113] The Court reasoned that although an inventor may not be "strictly speaking the first and original inventor," the legislature meant to secure rights for inventors who made "knowledge and use exist[] in a manner accessible to the public."[114] There is a line of case law following this reasoning since the *Gayler v. Wilder* decision.[115] However, these cases are all decided under the same exception, or justification, to award patent rights to the second inventor.[116] These cases, the only cases that award patent rights to the second inventor, all allow the second inventor to have priority because "the inventor who designedly, and with the view of applying it indefinitely and exclusively for his own profit, withholds his invention from the public, comes not within the policy or objects of the Constitution or acts of Congress."[117] Except for these cases, which reinforce the Patent Act's primary policy of public disclosure, the second inventor never gets priority over the first inventor. Thus, any attempt to glean support from this line of cases is without merit as the AIA simply gives the first filer priority regardless of whether the first party was in fact suppressing or concealing his invention or actively trying to reduce it to practice.

However, those in favor of the first-inventor-to-file system do make some very compelling policy arguments that are compatible with Congress' constitutional limitations. They argue that the patent policy in the Constitution is to in fact

---

108. Edward C. Walterscheid, *Priority of Invention: How the United States Came to Have a "First-to-Invent" Patent System*, 23 AIPLA Q.J. 263, 286 (noting that "the first patent bill propos[ing] a specific mechanism for determining the 'first and true' inventor . . . may have come about because the English practice in determining priority of invention was unclear and in any case deemed unsatisfactory.").

109. Sedia, *supra* note 106, at 118.

110. Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction at 24, Madstad Eng'g, Inc. v. U.S. Patent and Trademark Office, No. 8:12-cv-01589-SDM-MAP, 2012 WL 4050858 (M.D. Fla. Aug. 30, 2012) ("[T]he Supreme Court, and other courts, have long concluded that a person who is second to invent still qualifies as an inventor and may, under certain circumstances, be entitled to a patent.").

111. Gayler v. Wilder, 51 U.S. 477 (1850).

112. *Id.* at 477.

113. *Id.* at 497.

114. *Id.*

115. *See* Washburn & Moen Mfg. Co. v. Beat 'Em All Barbed-Wire Co., 143 U.S. 275 (1892); Kendall v. Windsor, 62 U.S. 322 (1858).

116. *See Washburn*, 143 U.S. 275; *Kendall*, 62 U.S. 322.

117. *Kendall*, 62 U.S. at 328.

promote the science by bringing new ideas into the public domain.[118] Indeed, the Supreme Court has said that, according to the Constitution, the reason for securing these limited exclusive rights, or the "the reward," is to gain the "advantage[] derived by the public" by getting access to new forms of important knowledge.[119] These rewards in exclusive rights are simply given to the owner as "a secondary consideration," and were considered by our founders to be a necessary embarrassment.[120] By having the progress of science as the main purpose of the Patents Clause, it seems that the first-to-file standard does a better job of accomplishing this purpose, as it compels disclosure to the public as fast as possible to gain priority rights.

Nonetheless, this argument fails to address the consequences of encouraging speed. While giving priority to the first inventor does encourage faster disclosure to the public, this also encourages poor quality in patent applications.[121] These potentially sloppy disclosures, made in haste to gain priority, will likely result in rejected applications with insufficient claims.[122] In light of these insufficient claims, inventors will make patentable improvements to the claims. However, these improvements will likely be unprofitable because they will be easily discoverable through now obvious research.[123] Conversely, the first-to-file system encourages more care because inventors know that they need only show progress to reduce the invention to practice and that careful drafting of applications will reduce the chances of the claims being found invalid during the prosecution process and any potential litigation.[124] Therefore, the argument that a first-to-file system would be better for the policy of compelling public disclosure is misplaced, as it will in fact diminish the quality of and bog down our patent system.

While there are many arguments in favor of the current first-to-invent system, one compelling argument may cause courts to uphold the constitutionality of the AIA. Generally, the Supreme Court provides Congress a very wide birth when legislating under the Patents and Copyrights Clause of the Constitution.[125] In *Golan v. Holder*, the Court upheld the constitutionality of provisions in the Uruguay Round Amendments Act of 1994, which granted U.S. copyrights to foreign works formerly unprotected in the U.S.[126] The Court reasoned that "[g]iven the authority we hold Congress has, we will not second-guess the political choice Congress made between leaving the public domain untouched and embracing Berne unstintingly."[127] Another example in the realm of copyright law comes from *Eldred v. Ashcroft*, where the Court held that extending copyright protection to the life of the author

118. *See* Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 151 (1989) ("[T]he ultimate goal of the patent system is to bring new designs and technologies into the public domain through disclosure.").
119. Grant v. Raymond, 31 U.S. 218 (1832).
120. Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 429 (1984).
121. Sedia, *supra* note 106, at 119–20.
122. *Id.*
123. *Id.*
124. *Id.*
125. *See* Golan v. Holder, 132 S. Ct. 873, 875 (2012).
126. *Id.*
127. *Id.* at 887.

plus seventy years did not violate the constitutional requirement that copyrights may only endure for limited times.[128] Again, the Court reasoned that the legislative authority conferred on Congress by the Copyright Clause requires the Court to "defer substantially to Congress."[129]

This substantial deference given to Congress by the Supreme Court has also been seen in many patent law cases.[130] In the landmark patent law case of *Graham v. John Deere Co.*, the Court held that "[w]ithin the limits of the constitutional grant, the Congress may . . . implement the stated purpose of the Framers by selecting the policy which in its judgment best effectuates the constitutional aim."[131] This power also extends to "set[ting] out conditions and tests for patentability."[132] Indeed, this deference to Congress with respect to the Patents Clause was established as far back as 1843 in *McClurg v. Kingsland*, where the Court noted "the powers of Congress to legislate upon the subject of patents is plenary by the terms of the Constitution, and . . . there are no restraints on its exercise . . . ."[133] Thus, it seems that the Supreme Court will likely have a strong inclination to not interfere with Congress' choice to pass the AIA.

However, the fact remains that the text, the policy arguments, and 220 years of law suggest that first-to-file should not be upheld as constitutional.[134] After all, judicial "deference in matters of policy cannot, however, become abdication in matters of law."[135] Indeed, this seemingly obvious unconstitutional provision of the AIA might rise to the level warned about in *Marbury v. Madison*: "The powers of the legislature are defined, and limited; and that those limits may not be mistaken, or forgotten, the constitution is written."[136] The first-to-file standard does seem to forget the language of the Patents Clause, and it is not only within the courts discretion to strike down unconstitutional provisions, but in fact "there can be no question that it is the *responsibility* of this Court to enforce the limits on federal power by striking down acts of Congress that transgress those limits."[137] While most people agree that something needs to be done about the problems inherent in our patent system, the AIA is not the correct means to go about solving the problems, as it would in fact make a larger problem. Fixing these small problems may substantiate the famous quote that "[m]ost problems begin as solutions."[138] If litigation challenging the first-to-file provision of the AIA reaches the Supreme Court, they will have to decide the question: Is the AIA constitutional, or did Congress jump onto the wrong solution because the problems with the current patent system were very relevant?

---

128. Eldred v. Ashcroft, 537 U.S. 186, 769 (2002).

129. *Id.* at 189; *see also* Sony Corp. of Am. v. Universal Studios Inc., 464 U.S. 417, 429 (1984) ("[I]t is Congress that has been assigned the task of defining the scope of the limited monopoly that should be granted to authors . . . in order to give the public appropriate access to their work product.").

130. *See* Figueroa v. United States, 466 F.3d 1023, 1031–32 (Fed. Cir. 2006).

131. *Graham*, 383 U.S. at 6.

132. *Id*

133. McClurg v. Kingsland, 42 U.S. (1 How.) 202, 206 (1843).

134. Sedia, *supra* note 106, at 118.

135. Nat'l Fed'n of Indep. Bus. v. Sebelius, 132 S. Ct. 2566, 2579–80 (2012).

136. Marbury v. Madison, 5 U.S. (1 Cranch) 137, 176 (1803).

137. *Sebelius*, 132 S. Ct. at 2579–80 (citing *Marbury*, 5 U.S. (1 Cranch) at 175–76) (emphasis added).

138. Lauder, *Patently Absurd*, *supra* note 69, at 1.

IV. HARMFUL EFFECTS ON SMALL BUSINESSES

A. Small Businesses and Innovation

> *From the mom-and-pop storefront shops that anchor Main Street to the high-tech startups that keep America on the cutting edge, small businesses are the backbone of our economy and the cornerstones of our Nation's promise.*
>
> President Barack Obama[139]

There is no doubt that "[s]mall businesses are the backbone of the U.S. economy, and the primary source of jobs for Americans."[140] Indeed, as congressional opponents of the AIA brought to light, the facts about small businesses in the 2007 fiscal year are as follows: they represent 99.7% of all employer firms; employ just over half of all private sector employees; generated 64% of new net jobs over the past fifteen years; create more than half of the nonfarm private gross domestic product; hire 40% of high-tech workers; make up 97.3% of all identified exporters; and produced 30.2% of the known export value.[141]

The effects of small business are also felt strongly in the patent industry as, according to a recent study performed by the Small Business Association, "small innovative firms obtained patents at a rate of 26.5 per hundred employees" from 2002–06 and large innovative firms obtained patents at a rate of 1.7 per hundred employees.[142] On average, "small innovative firms patent at a rate [sixteen] times higher than large innovative firms from a patents-per-employee perspective."[143] Moreover, even in the smaller companies this is more prevalent, as "companies with fewer than 25 employees will have a higher patent-to-employee ratio on average than firms with 50 employees, which will in turn have a higher patent-to-employee ratio than firms with 100 employees, and so on."[144] Thus, small businesses outperform larger businesses in patent issuance.

Additionally, these patents issued to small firms are more technologically important than those issued to large corporations. Small firms are twice as likely to

---

139. Karen Mills, *Support Your Local Businesses on "Small Business Saturday,"* THE WHITE HOUSE BLOG (Nov. 23, 2011, 12:00 PM), http://www.whitehouse.gov/blog/2011/11/23/support-your-local-businesses-small-business-saturday.

140. *Small Business*, OFFICE OF THE UNITED STATES TRADE REPRESENTATIVE, http://www.ustr.gov/trade-topics/small-business (last visited Nov. 25, 2013).

141. 157 CONG. REC. H4427 (daily ed. June 22, 2011) (unenacted). "The U.S. Department of Commerce defines small businesses as businesses which employ less than 500 employees." *See also id.*

142. Anthony Breitzman & Patrick Thomas, *Analysis of Small Business Innovation in Green Technologies*, SMALL BUS. ADMIN., OFFICE OF ADVOCACY 11 (Oct. 2011), *available at* http://www.sba.gov/sites/default/files/rs389tot.pdf.

143. *Id.*

144. Anthony Breitzman & Diana Hicks, *An Analysis of Small Business Patents by Industry and Firm Size*, SMALL BUS. ADMIN., OFFICE OF ADVOCACY iii (Nov. 2008), *available at* http://archive.sba.gov/advo/research/rs335tot.pdf.

produce a patent that will be among the 1% most cited patents.[145] Thus, in addition to producing more patents per employee, the patents issued are more technologically important.

Small businesses are also the primary stimulus of new job growth, as their innovation tends to be in "high tech, high growth industries, such as biotechnology, pharmaceuticals, information technology, and semiconductors."[146] While large businesses do, of course, innovate, they are more likely to create incremental advances in an industry to existing products, whereas the innovation from small firms is more likely to be a revolutionary advance.[147] This puts valuable technology in the hands of the small companies, resulting in many large companies either buying these small companies or licensing innovations from them.[148] This results in small firms being the "principal driver of new job growth,"[149] as well as generating the "overwhelming majority of new high-paying American jobs."[150]

This dominance in patent efficiency per employee, technologically important patents, and technologically revolutionizing advances that small businesses have compared to large corporations is important because patent rights are "vital to promoting innovation and creativity," which are "essential element[s] of our free-enterprise, market-based system."[151] This promotion of innovation, in turn, is "a primary driver of U.S. economic growth and national competitiveness."[152] Thus, small entities' excellence in the patent industry, as well as their ability to spur innovation at a greater level than large corporations, has helped make the "innovation economy of the United States . . . the envy of the world."[153]

B. America Versus the Rest of the World

The U.S. has the most innovative economy in the world…

Gary Lauder[154]

It is clear that the "innovation economy of the United States is the envy of the world," as "[o]ur venture capital industry accounts for more than 85% of the world's venture capital."[155] Indeed, opposed to economies such as Europe's, that

145. CHI Research, Inc., *Small Serial Innovators: The Small Firm Contribution To Technical Change*, SMALL BUS. ADMIN., OFFICE OF ADVOCACY 3 (Feb. 27, 2003), *available at* http://archive.sba.gov/advo/research/rs225tot.pdf.

146. Breitzman & Hicks, *supra* note 144, at i.

147. John Neis, *Post-Grant Review—Our Next Nightmare? VC Perspective*, 2 MED. INNOVATIONS & BUS. 43, 45 (2010), *available at* http://www.ipadvocate.org/mibj/pdfs/Neis_PGR%20VC.pdf.

148. Gary Lauder, *Venture Capital – The Buck Stops Where?*, 2 MED. INNOVATIONS & BUS. 14, 19 (2010), *available at* http://www.ipadvocate.org/mibj/pdfs/Lauder_Buck%20Stops.pdf [hereinafter *Venture Capital*].

149. Neis, *supra* note 147.

150. Lauder, *Venture Capital*, supra note 148.

151. ECON. AND STATISTICS ADMIN. & U.S. PATENT AND TRADEMARK OFFICE, INTELLECTUAL PROPERTY AND THE U.S. ECONOMY: INDUSTRIES IN FOCUS, at v (Mar. 2012) *available at* http://www.uspto.gov/news/publications/IP_Report_March_2012.pdf.

152. *Id.*

153. Neis, *supra* note 147, at 43.

154. Lauder, *Venture Capital*, *supra* note 148.

155. Neis, *supra* note 147, at 43.

"suffer[] from extraordinary corporate rigidity," the U.S. economy allows start-ups to break into the corporate scene.[156] In contrast, Europe's economy stifles innovation, which is "why Europe has failed to produce a Bill Gates."[157] In the second half of the twentieth century, Europe produced only twelve Fortune 500 Companies while the U.S. produced fifty-one, and other emerging countries produced forty-six.[158] Young companies in the U.S. simply have an easier time emerging than similar companies in Europe.[159] Moreover, while many companies are created in European countries, the U.S. economy allows start-up companies to grow much faster than their European counterparts.[160] The U.S. patent system is one of these enabling factors.[161]

C. How First-to-File Will Hurt Small Entities

> *We believe that much of the legislation is a disincentive to inventiveness, and stifles new businesses and job growth by threatening the financial rewards available to innovators in [the] U.S. industry.*
>
> John Meredith & Keith Grzelak[162]

One of the main policy questions regarding switching from first-to-file to first-to-invent is that patent priority will become a "race" to the patent office to file a patent application, which will favor large corporations over small companies and individual inventors.[163] The basic idea is that the large corporations, which have more resources, such as more lawyers and money, will be able to get through the patent prosecution process faster than their smaller competitors, who have fewer

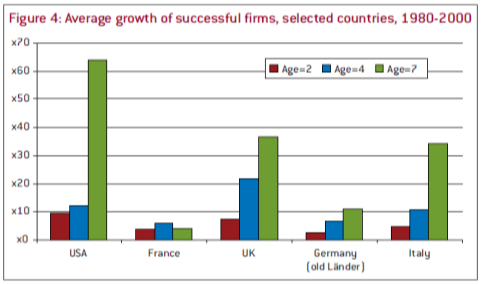
156. Thomas Philippon & Nicholas Véron, *Financing Europe's Fast Movers*, BRUEGEL 2 (Jan. 2008) http://www.scribd.com/fullscreen/55539994?access_key=key-17bapnbussvx38t1hhd1&allow_share=true&view_mode=scroll (quoting Leslie Crawford, *Rebel Seeks Innovators to Shake Up Europe*, FIN. TIMES, Jan. 15, 2008, http://www.sant.ox.ac.uk/people/knicolaidis/clippings.pdf).

157. *Id.*

158. *Id.*

159. *Id.* at 3.

160. *Id.* Graph from Philippon & Véron, *supra* note 156, at 3.



161. Lauder, *Patently Absurd*, *supra* note 69, at 2 ("The existing US patent system is one of the enablers of newer companies to establish themselves.").

162. Letter from John Meredith, President, IEEE-USA & Keith Grzelak, Intellectual Prop. Policy Comm. Chairman, IEEE-USA, to Senator Harry Reid, Senate Majority Leader (Aug. 27, 2007), *available at* http://www.patenthawk.com/blog_docs/070827_IEEE-USA_Patent%20Reform-Senate.pdf.

163. Donald S. Chisum, *The Harmonization of International Patent Law*, 26 J. MARSHALL L. REV. 437, 447 (1993).

resources, and win the race to the patent office to gain patent priority.[164] There are several ways large corporations will have a distinct advantage over small companies.

The cost of filing patent applications is less of a concern for large corporations, as resources are less of a factor compared to small start-ups.[165] Studies show that relatively smaller firms tend to report a significantly higher sensitivity to the costs of filing and enforcing patents, whereas the difficulties and costs of acquiring and enforcing patents is not salient for larger firms.[166] Small companies must raise capital by presenting to investors or by slowing their design for a patent to put company money towards their patent prosecution. During this time, large companies are able to file an application much faster, regardless of who invented first, and gain priority.[167]

Additionally, larger corporations have an advantage over small companies because they have more patent attorneys or agents as well as routinized patent procedures put in place for faster patent application.[168] This corporate advantage will put "undue pressure on patent attorneys and agents to provide unreasonably fast service to their [small] clients" which will lead to "poor quality disclosures. . . [on smaller entities'] patent applications."[169]

These company capital and legal resource factors raise serious questions about the first-to-file system and its likely effect on small entities. While these questions and concerns are merely conjectural at the moment, many answers can be found in looking to other similar transitions taken by other countries.

D. Caution from Canada

> *In short, we find with some confidence that a shift to first-to-file from first-to-invent results in a reduction of patenting by individual inventors relative to firms.*
>
> David S. Abrams & R. Polk Wagner[170]

Though the U.S. cannot yet see the effects the AIA will have on small businesses and inventors, a recent shift did occur in a highly-developed country comparable to the U.S.[171] In 1989, Canada changed their patent system from a first-to-invent system to a first-to-file system.[172] This switch serves as a great comparative tool to predict the effects the AIA will have on the U.S., as Canada has a very simi-

---

164. David S. Abrams & R. Polk Wagner, *Poisoning the Next Apple? The America Invents Act and Individual Inventors*, 65 STAN. L. REV. 517, 520 (2013).

165. *Id.* at 528 n.62. ("The most recent statistics available from the American Intellectual Property Law Association suggests that on average filing a patent application of low complexity costs about $7[,]000, and that filing a patent of relative complexity costs between $9[,]000 and $12,000.").

166. Stuart J.H. Graham et al., *High Technology Entrepreneurs and the Patent System: Results of the 2008 Berkeley Patent Survey*, 24 BERKELEY TECH. L.J. 1255, 1310 (2009).

167. Lauder, *Patently Absurd*, *supra* note 69, at 10.

168. Abrams & Wagner, *supra* note 164, at 528–29.

169. Chisum, *supra* note 163, at 447–48.

170. Abrams & Wagner, *supra* note 164, at 559*; see also id.* at 521 ("We find that the Canadian change to FTF generally harmed individual inventors.").

171. *Id.* at 521.

172. *Id*.

lar patent system to that of the U.S., similar economic features, close geographic proximity, and shares a similar, integrated economy with the U.S.[173] These similarities make a comparison between Canada's switch to first-to-file and the U.S.'s switch both possible and helpful in determining how the switch will affect small companies in the U.S.

Several studies have been performed, giving much needed empirical evidence on how the switch from first-to-file and first-to-invent influences the level and distribution of incentive activity.[174] Using information made available from the Canadian Intellectual Property Office (CIPO)[175] as the output and R&D spending as the input, these studies measured "inventive activity carried out by Canadians before and after the enactment" of the first-to-file system.[176] Acknowledging that other factors besides the change of law can affect the results of the study and measuring innovativeness, the studies isolated possible confounding effects by focusing their analysis on inventive activity between certain dates[177] or with techniques that control for these unwanted effects.[178] After performing an empirical analysis on the data collected, the studies analyzed their results and came back with many conclusions and observations,[179] of which this report is concerned about the individual inventors versus large corporations patenting behavior.

To test the idea of whether a shift in patent policy will hurt small entities, the studies examined the representation of individual inventors in the U.S. and Canada.[180] The data in Canada shows a "sharp decline in the fraction of individual inventors, from 10.7% prior to the end of 1989 to 7.8% afterward."[181] In the U.S. "the proportion of individual inventors dropped slightly, from 17.4% to 16.5%."[182] Both of these trends show that the fraction of individual inventors following the Canadian law change experienced a decline. Indeed, not only did Canadian small businesses witness a substantial decline in patenting in the U.S., but large corporations continued to experience substantial growth, making small inventors "lose ground" to them.[183] The conclusions from studies have been consistent in their findings:

---

173. *Id.* at 531.

174. Shih-tse Lo & Dhanoos Sutthiphisal, *Does it Matter Who Has the Right to Patent: First-to-invent or First-to-file? Lessons From Canada*, NAT'L BUREAU OF ECON. RESEARCH 2 (Apr. 2009), *available at* http://www.nber.org/papers/w14926.pdf?new_window=1.

175. *See generally IP Data Products: Patents*, CANADIAN INTELLECTUAL PROP. OFFICE, http://www.cipo.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/wr02466.html (last visited Nov. 25, 2013).

176. Lo & Sutthiphisal, *supra* note 174, at 5.

177. *Id.* at 11 ("[To] assess the impact of the Reforms on Canadian inventors while isolating possible confounding effects caused by shifts in U.S. patent policy and international treaties, our analysis focuses on inventive activity during 1983 and 1994.").

178. Abrams & Wagner, *supra* note 164, at 532 ("The research design we employ is a modern econometric technique known as *difference-in-difference* analysis, which is used to control for effects other than the priority rule change. By comparing the observed differences in individual patenting behavior in Canada across the 1989 change in law to the differences in individual patenting behavior in the United States during the same time period, we can isolate the effect of the law change on individual patenting behavior in Canada." (emphasis added)).

179. *Id.* at 536.

180. *Id.* at 546.

181. *Id.*

182. *Id.*

183. Lo & Sutthiphisal, *supra* note 174, at 27.

> The divergence between small entities and large corporations in patenting after the Reforms supports the idea that a switch to a first-to-file system will result in relatively less inventive activity being carried out by independent inventors as well as small businesses, and more being channeled through large corporations instead.[184]

Additionally, not only did the switch have a negative impact on independent inventors and small firms, but "Canada's adoption of a first-to-file system had virtually no positive effect on its overall inventive activity."[185] Indeed, another result from the switch to first-to-file was that "[p]atents made by American inventors were, on average, of a higher value than those made by Canadians..."[186]

Thus, Canada has shown the U.S. that the switch to first-to-file, while having many positive results, such as international harmonization and streamlining of patent priority, does come at a cost. This cost may not seem significant as the number of overall patent applications did not decrease, but small inventors have played an important role in the U.S. since its independence. Examples such as Thomas Edison, Bill Gates, Yahoo!, and Google, Inc. illustrate that point.[187] The patent switch might not hurt overall patent application numbers, but it will significantly affect the people who have kept us at the forefront of the world's technological advances.

E. Lobbying the America Invents Act

> *First inventors have the exclusive constitutional right to their inventions. This right extends to every citizen, not just those with deep pockets and large legal teams. A politicized patent system will further entrench those very powerful interests with deep pockets and lots of lobbying offices…*
>
> Congresswoman Marcy Kaptur[188]

When looking to see who will benefit from a controversial bill, determining who the main lobbyists for the passing of the bill is often the best way to determine who the bill may benefit and who the bill may harm. In November of 2011, First Street Research Group, an association that "reviews, investigates and analyzes the data in First Street [and the lobbying industry] to publish exclusive reports [and analysis] on the people and organizations influencing policy in Washington, DC.,"[189] published a report on the lobbying of the America Invents Act[190] Lobbying

184. *Id.* at 27.
185. *Id.*
186. *Id.* at 21.
187. *Id.* at 29.
188. 157 CONG. REC. H4421 (daily ed. June 22, 2011) (statement of Rep. Kaptur) (Marcy Kaptur is the U.S. Representative for Ohio's 9th Congressional District and is a member of the Democratic Party).
189. FIRST STREET: WHERE PEOPLE AND POLICY INTERSECT, *About*, http://www.firststreet.cqpress.com/content/about.aspx (last visited Nov. 25, 2013); *see* Zachary Sniderman, *Lobbyists and Politicians Beware: First Street Reveals Your Hidden Connections*, MASHABLE (Nov. 18, 2011), http://mashable.com/2011/11/18/first-street-politics-platform/. This gives readers a better of idea of where the facts and reports come from out of First Street: "First Street is based on decades of information pulled from congressional staff directories and self-reporting forms. CQ Press, a political publishing house, created First Street to turn that overwhelming amount of data into a searchable database on where people worked, who they worked for, and where their allegiances may lie. The database currently contains more than 660,000 lobbying forms, 240,000 congressional and federal staffers, 32,898 clients of registered lobbying organizations and 20,000 congressional and federal organizations. In total, First Street says it covers

for the AIA in the House of Representatives involved 318 organizations and over 1,000 lobbyists who combined to spend an amount of over $400 million in efforts to gain Congressional support.[191] Lobbying in the Senate was similar with 289 organizations spending over $390 million in 2011 for their lobbying activity and over 1,000 lobbyists, including former members of Congress and other federal government workers.[192] While many of the organizations involved in the lobbying are to be expected, considering the clear large corporation benefits the AIA gives, there will be some unexpected parties involved in the lobbying.

The organizations are ranked by the top five in quarterly spending in the following three areas: (a) the bill by amount spent lobbying, (b) the bill by number of lobbyists hired, and (c) the USPTO by amount spent lobbying.[193] The top five organizations that lobbied the bill by amount spent are as follows: (1) Chamber of Commerce of the U.S.A. at $10,010,000; (2) National Association of Realtors at $7,120,000; (3) AT&T Services, Inc. and its affiliates at $6,840,000; (4) General Electric Company and its subsidiaries at $6,770,000; and (5) Comcast Corporation at $5,820,000.[194] The top organizations who lobbied using the highest number of lobbyists are as follows: (1) Independent Community Bankers of America with eighteen lobbyists spending $1,585,000; (2) Securities Industry and Financial Markets Association with sixteen lobbyists spending $1,370,000; (3) AT&T Services, Inc. and its affiliates with fifteen lobbyists spending $6,840,000; (4) Yahoo! Inc. with fifteen lobbyists spending $60,000; (5) Hewlett-Packard Company with fifteen lobbyists spending $60,000; and (6) Research in Motion with fifteen lobbyists spending $50,000.[195] Finally, the top five organizations that lobbied the USPTO by amount spent are as follows: (1) Chamber of Commerce of the U.S.A. at $10,890,000; (2) General Electric Company and its subsidiaries at $8,590,000; (3) Pharmaceutical Research and Manufacturers of America at $4,690,000; (4) Pfizer, Inc. at $3,790,000; and (5) National Association of Broadcasters at $3,240,000.[196] Other members of the coalition for the patent reform, are companies such as BP, Caterpillar, Dow Chemical Company, DuPont, Motorola, and Texas Instruments.[197]

---

more than 2 million connections." *Id.*; *see also First Street Research Group Report Reveals Lobbying Connections of GOP Candidates*, BUSINESS WIRE, (March 19, 2012, 7:00 AM), http://www.businesswire.com/news/home/20120319005147/en/Street-Research-Group-Report-Reveals-Lobbying-Connections.

190. CQPRESS, FIRST STREET REPORT: LOBBYING THE AMERICA INVENTS ACT 1 (2011), *available at* http://www.firststreetresearch.files.wordpress.com/2011/11/first-street-report-lobbying-the-america-invents-act.pdf.

191. *Id.* at 2.

192. *Id.*

193. *Id.* at 4–6, 11 (This sets out values according to 2011 quarterly reports).

194. *Id.* at 4. While it may seem strange to see the National Association of Realtors as one of the top spenders for lobbying the AIA, there is, of course, a reason for this. Realtors encounter the patent system mostly as a defendant to patent infringement lawsuits, and the AIA will put in place mechanisms to reduce the costs and number of suits filed as well as making it less expensive to defend patent infringement suits. *See* Robert Freedman, *Obama Signs Patent Law: Help to Real Estate?*, NAT'L ASS'N OF REALTORS (Sept. 16, 2011), http://www.speakingofrealestate.blogs.realtor.org/2011/09/16/obama-signs-patent-law-help-to-real-estate/.

195. CQPRESS, *supra* note 190, at 5–6.

196. *Id.* at 11.

197. *Id.* at 12.

While this report is not as expansive as it could be, it does show that many of the largest lobbyists and spenders in support of the AIA are in fact large, international corporations. While this does not necessarily mean the law will hurt small businesses, it does shed light on who expects the greatest benefit.

F. AIA Mitigating Effects on Small Businesses

Small businesses are not the only entities that realize the harmful effects of the first-to-file provision, as the drafters of the AIA drafted provisions that attempted to mitigate the obvious harmful effects and disadvantages it puts on small entities.

The most obvious part of the AIA recognizing the harmful effect it will have on small entities is found in the language of the AIA itself, assuring that Congress and the new patent system "should promote industries to continue to develop new technologies that spur growth and create jobs across the country which includes *protecting the rights of small businesses and inventors from predatory behavior that could result in the cutting off of innovation*."[198] While this text displays an honorable intent, the passing of the AIA itself will cause this predatory behavior that "could" result in the cutting off of innovation.

The AIA requires the USPTO to conduct a "study on implementation" which requires the Director to report to Congress after conducting a four year study regarding "the manner in which this Act and the amendments made by this Act are being implemented" and on other aspects "with respect to patent rights, innovation to the United States, competitiveness of the United States markets, access by small businesses to capital for investment, and such other issues. . . ."[199] This provision explicitly recognizes that there may be harmful effects on our economy, innovativeness, and small businesses.

A further study that the AIA requires the USPTO to conduct is intended to determine how the Office "can best help small businesses with international patent protection. . . ."[200] This report is due 120 days after the date of enactment of the AIA and the Director shall let Congress know his determination of whether a fund loan program, grant program, or neither should be established as well as giving any recommendations the Director may have.[201]

Another commonly cited provision by proponents of the AIA with respect to the effects on small businesses is the provision establishing the "micro-entity" category.[202] The AIA has several different ways to qualify as a "micro-entity."[203] What this small entity classification gives the applicants in this category is a fifty percent fee reduction for "filing, searching, examining, issuing, appealing, and maintaining patent applications and patents."[204] The AIA also adds a category for

198. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 30, 125 Stat. 284, 339 (2011) (emphasis added).

199. *Id.* § 26(a), (b), 125 Stat. at 338.

200. *Id.* § 31(a), 125 Stat. at 339.

201. *Id.* § 31(b), (c), 125 Stat. at 339–40.

202. John Koenig, *The America Invents Act is Better for Small Business* (Sept. 21, 2011), http://www.johnkoenig.com/the-america-invents-act-is-better-for-small-business/.

203. AIA § 10(g), 125 Stat. at 318.

204. *Id.* § 10(b), 125 Stat. at 316–17.

applicants now referred to as "micro entities" who get a seventy-five percent reduction in fees.[205] This reduction in fees undoubtedly will *help* small entities, but it still does not solve the glaring issue of their ability to compete with the pace at which the larger corporations will be able to file. Moreover, the real expenses involved in filing a patent application come from the $5,000 to $10,000 in attorney's fees, not the $915 it costs a micro entity in fees to file with the USPTO.[206]

Two final provisions that seem to have the most hope for small businesses are found in Sections 28 and 32 of the AIA. Section 28 creates a "Patent Ombudsman Program for Small Business Concerns," or, as proponents of the Act call the program, "a champion at the PTO" who looks out for their interests and helps small businesses secure patents.[207] Section 32 of the AIA, institutes a pro bono program that requires the Director of the PTO to "work with and support intellectual property law associations across the country in the establishment of pro bono programs designed to assist financially under-resourced independent inventors and small businesses."[208] This last provision seems to understand that the best way to mitigate the harmful effects of the first-to-file system imposed by the AIA is to attempt to level the playing field. If small businesses are able to have proficient counsel at the beginning of their patent obtaining efforts, it will level the playing field at least some with the large corporations who have the counsel from the beginning as well. This, along with other ideas addressed and considered,[209] are the types of actions that need to be made in order to put small businesses on the same playing field as they were before the passing of the AIA.

V. CONCLUSION

> *By relocating the fulcrum under the risk-reward balance, the AIA undermines inventors' and investors' confidence that undertaking the process of invention and product development is worthwhile. This will harm early stage innovation, hurt small business, and "ultimately jeopardize America's ability to create new jobs."*
>
> Jennifer L. Case[210]

The signing of the America Invents Act undoubtedly "will speed up the patent process"[211] and harmonize our system with the rest of the world, but at what cost? Whether the change from first-to-invent to first-to-file "will help American entre-

205. *Id.*

206. Brad Fach, *How much does it cost to patent an idea?*, PATENTFILE.ORG, http://www.patentfile.org/howmuchdoesitcosttopatentanidea/ (last visited Nov. 25, 2013).

207. AIA § 28; 157 CONG. REC. H4424 (daily ed. June 22, 2011) (statement of Rep. Lamar Smith).

208. AIA § 32, 125 Stat. at 340.

209. *See infra* Part V.

210. Case, *supra* note 11, at 77.

211. Press Release, The White House Office of the Press Secretary, President Obama Signs America Invents Act, Overhauling the Patent System to Stimulate Economic Growth, and Announces New Steps to Help Entrepreneurs Create Jobs (Sept. 16, 2011), *available at* http://www.whitehouse.gov/the-press-office/2011/09/16/president-obama-signs-america-invents-act-overhauling-patent-system-stim.

preneurs and businesses bring their inventions to market sooner,"[212] or if that is offset by a loss of innovation by the simplification of the priority rules, is a question that can only be answered with time. However, comparing our innovative economy and patent system to the rest of the world and observing how a similar change affected Canada, it seems that this change will hurt both innovation and the chances of small inventors to break into the market.[213] This ability for small inventors to break into the corporate structure is what has long made America unique and helped great industry innovator's such as Steve Jobs and Bill Gates emerge. If the Supreme Court upholds the constitutionality of the AIA, despite the numerous arguments against it, small inventors will be the ones that have to find ways to remain competitive and keep in mind ways to cost-effectively maximize their patent protection.

However, there are some ways that inventors can mitigate the effects of the AIA themselves, such as simply becoming familiar with the patent process. Applicants can save a lot of time and money with even small amounts of knowledge of the patent process, such as knowing deadlines to avoid fees and having to get extensions. This will also allow applicants to minimize the roles of their patent firms or attorneys by allowing them to perform much of the process of filing without the help of their attorney.

Another very useful tool for applicants to utilize is a provisional patent application. A provisional application allows the filer to establish an initial priority date, while buying time to raise capital from investors.

While this may be against public policy, one of the best ways to mitigate the first-to-file system is to move our patent system more towards a trade secret until one is ready to patent. It is true that one cannot benefit from their invention during this period of secrecy, but the inventor could continue to perfect their invention and gain investors until such time that they are ready to file.

Finally, arguably the most realistic way for small inventors to mitigate the harmful effects of the AIA that they will experience is to utilize Section 32 of the AIA, which institutes a pro bono program.[214] The director of the USPTO will be the one instituting this program, and not only could this pro bono program utilize intellectual property law associations from across the country to assist small businesses,[215] but the program could also successfully enlist the work of second and third year law students pursuing a career in patent law. Many law students pursuing a career in patent law have passed the patent bar by their second or third year to make themselves more attractive to employers. Additionally, many law schools have mandatory pro bono hours that their students must complete as a prerequisite for graduation.[216] A program enabling law students to contact needy inventors and

212. *Id.*

213. *See supra* Part IV.C–D.

214. Leahy-Smith America Invents Act, Pub. L. No. 112-29, § 32, 125 Stat. 284, 340 (2011).

215. *Id.*

216. ABA Standing Committee on Pro Bono and Public Service, *Pro Bono*, AM. BAR ASS'N, http://www.americanbar.org/groups/legal_education/resources/pro_bono.html (last visited Nov. 25, 2013).

* Student Author. J.D. Candidate 2014, University of Idaho College of Law. I would like to thank Professor Duncan Palmatier and Allison Parker for their advice, feedback, and suggestions in writing

work under the supervision of experienced patent attorneys to fulfill their pro bono hours would benefit both groups of people and help mitigate the effects the AIA will have on small businesses and inventors.

In conclusion, with the passing of the AIA, the burden of trying to stay competitive with the large corporations, who were able to afford lobbying for the Act in Congress, falls on the small businesses themselves. If the Supreme Court upholds the provision of the AIA instituting a first-to-file system, despite the language of the Constitution and 220 years of established law showing first-to-file is unconstitutional, the uniquely American system of patent law that has placed us on the forefront of innovation will be erased and successfully streamline our system and harmonize the U.S. with the rest of the world who has trailed us in innovation. While the AIA does resolve many of the problems with our current system, it does so in a way that will also create a new problem: reducing the place for American ingenuity, which has long made the U.S. patent system unique and coveted.

*Eric P. Vandenburg**

this article. Additionally, I would like to thank my parents Larry and Paula Vandenburg for their encouragement and continued support throughout this writing process.