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# How the Leahy-Smith America Invents Act Sought to Harmonize United States Patent Priority with the World, A Comparison with the European Patent Convention

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### HOW THE LEAHY-SMITH AMERICA INVENTS ACT SOUGHT TO HARMONIZE UNITED STATES PATENT PRIORITY WITH THE WORLD, A COMPARISON WITH THE EUROPEAN PATENT CONVENTION

#### INTRODUCTION

Ever since 1790, the United States patent priority system has differed with that of the rest of the world. In every industrialized nation with a patent regime other than the United States, priority is given to the first inventor that files a patent application for a new invention. In the United States, however, a patent has historically been awarded to an inventor that files a patent application after an application has already been filed for the same invention, if he can prove through a variety of steps that he was the first inventor. Since patent priority was granted from the time of invention instead of the time of filing, what constituted prior art for novelty purposes was similarly judged at the time of invention. This temporal difference significantly altered the limitations on patentability in the United States as compared to the rest of the world.

One major international body of patent legislation that follows the typical international first-to-file system is the European Patent Convention ("EPC"). The EPC is a body of patent legislation that governs patent granting procedure in the European Patent Office ("EPO"). The EPO is a centralized European office in which inventors in any one of its designated member countries may file for a patent. The EPO is one of the largest global patent offices and is a prime example of the typical international patent priority system.

On September 16, 2011, United States President Barack Obama signed into effect the Leahy-Smith America Invents Act. Among other things, the Act converted the United States from a first-to-invent priority system to a first-inventor-to-file system. In doing so, Congress claimed its motive was to better harmonize the United States patent priority system with that of the rest of the industrialized world.

This Note examines the Leahy-Smith America Invents Act to determine if Congress in fact achieved its goal of harmonizing the United States patent priority system with the rest of the world, when compared to the European Patent Convention. In doing so, it argues that while the United States did intend to better harmonize the geographic scope of prior art references, it failed to clarify the implications of changing the grace period for inventors to commercially exploit their inventions prior to filing. It also added language regarding prior art references that is wholly absent from the European Patent Convention.

#### I. HISTORICAL BACKGROUND

The grant of Congressional power to regulate patent rights in the United States is derived from the Constitution, which grants Congress broad power to "promote the Progress of Science and useful Arts ....." Out of this modest clause, the United States patent system was born. The patent system has been described as having two main purposes: (1) to protect the inventor or discoverer of a "new and useful, art, machine, article of manufacture, composition of matter, or any new and useful improvement thereof,"<sup>2</sup> by granting him limited monopoly rights and (2) to promote the progress of science by requiring the inventor to disclose his invention to the public in return for these monopoly rights.<sup>3</sup> In 1790, the first Patent Act was passed in the United States, prescribing requirements and limitations on patentable subject matter.<sup>4</sup> For the next 160 years the Patent Act was subject to considerable amendments until its final major change in 1952.<sup>5</sup> Many amendments of the Patent Act dealt with what was considered prior art in terms of novel inventions,<sup>6</sup> what improvements upon prior art were deemed obvious and therefore

<sup>1.</sup> U.S. CONST. art. I, § 8, cl. 8.

<sup>2.</sup> MAVIS FOWLER, THE LAW OF PATENTS 8–9 (1996).

<sup>3.</sup> Id. For a brief but thorough description of the Constitutional history of patent law in the United States, see Bilski v. Kappos, 130 S.Ct. 3218, 3239–40 (2010) (Stevens, J., concurring).

<sup>4.</sup> Patent Act of 1793, ch. 11, 1 Stat. 318-323, § 1 (1793); see also Patent Act of 1790, ch. 7, 1 Stat. 109 (1790). The crux of the Patent Act came three years later in an amendment that was largely drafted by Thomas Jefferson to better define patentable subject matter as "any new and useful art, machine, manufacture or composition of matter." See Bilski, 130 S.Ct. at 3245. This portion of the Patent Act describing patentable subject matter was largely unchanged until its 1952 revision replacing the word "art" with the word "process," greatly expanding patentable subject matter. See Elizabeth D. Lauzon, Annotation, Construction and Application of Patent Act—United States Supreme Court Cases, 27 A.L.R. FED.2D 151 (2008); see also Diamond v. Diehr, 450 U.S. 175 (1981) (defining "process" under 35 U.S.C. § 101).

<sup>5.</sup> See generally Lauzon, supra note 4; see also ALAN L. DURHAM, PATENT LAW ESSENTIALS 1–2 (2d ed. 2004).

<sup>6.</sup> See Patent Act of 1836, ch. 357, 5 Stat. 117 (1836). The Act established the Patent Office, gave it the sole right to issue patents, and required a patent application to "particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery." *Id.* § 6. This dealt with stricter specification requirements to be disclosed to the Patent Office in order for them to determine if the invention was in fact novel. *See A Brief History of Patent Law of the United States*, LADAS & PARRY, LLP, http://www.ladas.com/Patents/USPatentHistory.html (last updated July 17, 2009).

unpatentable,<sup>7</sup> and other general considerations that might prevent an otherwise valid invention from being granted patent rights.<sup>8</sup>

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#### A. 35 U.S.C. § 102<sup>9</sup> Before the Leahy-Smith America Invents Act

Prior to the Leahy-Smith America Invents Act ("America Invents Act"), § 102 of title 35 of the U.S. Code primarily covered novelty and statutory bars to invention.<sup>10</sup> Novelty is the requirement that, in order to get patent rights, the inventor must have created something new. Although

<sup>7.</sup> The non-obviousness inquiry stemmed originally from the 1793 Patent Act Amendment barring patents where the party seeking the patent had "simply changed the form or the proportions of any machine, or composition of matter, in any degree." ROBERT MERGES & JOHN DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 631 (5th ed. 2011). The primary interpretation of the standard, however, came from case law and especially the holding in *Hotchkiss v. Greenwood*, 52 U.S. 248 (1851) (holding that, "where a claimed invention combines old elements, the invention is not patentable where the combination requires no more 'ingenuity and skill' than that 'possessed by an ordinary mechanic acquainted with the business."). MERGES & DUFFY, *supra*, at 633.

<sup>8.</sup> The so-called "statutory bar" requirements were originally set forth in the 1836 amendment to the Patent Act. Patent Act of 1836, ch. 357, 5 Stat. 117, § 7 (1836).

<sup>9. 35</sup> U.S.C. § 102 states:

Novelty and Loss of Right

A person shall be entitled to a patent unless—

<sup>(</sup>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 . . .

<sup>(</sup>c) he has abandoned the invention, or

<sup>(</sup>d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or

<sup>(</sup>e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language or

<sup>(</sup>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.

<sup>35</sup> U.S.C. § 102.

<sup>10.</sup> MERGES & DUFFY, supra note 7, at 368.

this definition appears unequivocal, there are many requirements in asserting that an invention is novel.<sup>11</sup> Questions as to these requirements tend to arise in priority disputes between inventors if two inventors create identical or nearly identical inventions at nearly the same time.<sup>12</sup> Most countries, however, do not share priority disputes over inventor rights to the same extent as the United States. This is because novelty in almost every other country is not measured by time of invention, but instead by the inventor's filing date.<sup>13</sup>

In the United States, § 102(g) provides the basis for the first-to-invent novelty requirement.<sup>14</sup> As is obvious on the statute's face, under the § 102(g) novelty standard, a party may block another party's application for patent or obtain a declaration of the patent's invalidity in an infringement suit if it has already been issued, if he can establish that he first invented the art.<sup>15</sup> The basic rules are straightforward:

12. "In a world where inventors race against each other, precise rules are necessary to determine which of the competing inventors will be recognized as the first, the winner of the race." *Id.* at 448.

13. Id. at 369.

Id.

<sup>11.</sup> *Id.* at 367. Section 102(a) prohibits an inventor from obtaining a patent if his invention was known or used, described in a publication, or patented. *Id.* at 369. Section 102(e), the so called "secret prior art" section, prohibits an inventor from obtaining a patent if his invention was described in an application for a patent by another before his date of invention if the other's application for patent is eventually published or becomes a patent. *Id.* at 435. This is considered the "secret prior art" section because an invention can be deemed anticipated and therefore unpatentable even though the inventor has no way of knowing this if the anticipation comes from another's filed patent application that has not yet become publicly available. *Id.* at 435–36.

<sup>14.</sup> Id.; see 35 U.S.C. § 102(g). It states that:

<sup>[</sup>A] person shall be entitled to a patent unless ... 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 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.

<sup>15.</sup> This is not an easy standard for the alleged prior inventor to meet. The alleged prior inventor must first prove that he conceived of the invention prior to the applicant's invention date. *See* Brown v. Barbacid, 276 F.3d 1327 (Fed. Cir. 2002); *see also In re* Tansel, 253 F.2d 241, 243 (C.C.P.A. 1958) (holding that for conception to be established "it is sufficient that the inventor [discloses enough to] enable a person of ordinary skill in the art to construct the apparatus without extensive research or experimentation"); Burroughs Wellcome Co. v. Barr Laboratories, Inc., 40 F.3d 1223, 1228 (Fed. Cir. 1994) (holding that "an inventor need not know that his invention will work for conception to be complete. He need only show that he had the idea; the discovery that an invention actually works is part of its reduction to practice."). He must then show that he reduced the invention to practice, or was at the very least diligent in reducing his invention to practice. *See Brown*, 276 F.3d at 1337. If he can meet both of these stringent standards, he is then likely to have to fight off a defense's argument that he abandoned, suppressed, or concealed his invention. *See* Dow Chemical Co. v. Astro-Valcour, Inc.,

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To be eligible for the patent, a claimant must have conceived of the invention and reduced it to practice, either by making a working embodiment of the invention or by filing a patent application. The successful claimant is the one who was the first person to conceive of the invention unless that person is not diligent in reducing the invention to practice. If the first conceiver was not diligent in reducing the invention to practice, that applicant forfeits the right to the patent, and the process continues until only one applicant remains. The earliest applicant (referred to as the "senior party" to the interference) is presumed to be the first inventor, and subsequent applicants (referred to as "junior parties") must establish their earlier date of invention.<sup>16</sup>

Questions as to the first inventor typically arise in what are called interference proceedings.<sup>17</sup> An interference proceeding is a hearing in front of a panel of patent attorneys at the Patent and Trademark Office in which the panel decides which inventor gets priority in an invention over another inventor or group of inventors.<sup>18</sup> Although it may seem rather unlikely that

<sup>267</sup> F.3d 1334, 1342 (Fed. Cir. 2001) (stating that "a failure to file a patent application, to describe the invention in a published document, or to use the invention publicly, within a reasonable time after first making the invention may constitute abandonment, suppression, or concealment."); *see also* Allen v. W.H. Brady Co., 508 F.2d 64, 67 (7th Cir. 1974) (holding that an inquiry on abandonment, concealment, and suppression is only made for the time prior to the second inventor's time of invention).

<sup>16.</sup> Max Oppenheimer, *Harmonization Through Condemnation: Is New London the Key to World Patent Harmony*?, 40 VAND. J. TRANSNAT'L L. 445, 459–60 (2007).

<sup>17.</sup> Michael F. Martin, The End of the First-to-Invent Rule: A Concise History of its Origins, 49 IDEA 435, 437–38 (2009).

<sup>18.</sup> Id. at 439. Often, single parties in interference proceedings will be representative of an inventive entity that may represent a group of inventors that are actually claiming the art. Id. Interference proceedings most often involve two of these inventive entities, though at times there have been more than two parties in interference proceedings. Id. (citing Standard Oil Co. v. Montedison, S.P.A., 494 F. Supp. 370 (D. Del. 1980) ("five party interference over invention of solid crystalline polypropylene"); Fiers v. Revel, 984 F.2d 1164 (Fed. Cir. 1993) ("three-party interference over invention of DNA which codes for human fibroblast interferon-beta peptide")). There are, however, at least two scenarios in which a claimed invention is not in the prior art and multiple parties may make claim to the invention:

<sup>[</sup>First], if the prior art is interpreted to include only the domestic technology base, then a traveler who observes someone else's invention in a foreign country and is the first to bring news of the invention back home would be adding to the technology base. If several travelers each brought the same technology home, it would be logical and fair to award a patent to the first to file an application. In this case, the contribution to the public is not the invention of the technology but its local dissemination. If the actual (foreign) inventor were then to travel to the domestic country and file a patent application, a different problem would arise: there would be a conflict between the first filer and the true inventor. . . [Secondly] [d]erivation is another circumstance where there might be multiple claimants. The true inventor might choose not to file a patent application. Another individual might learn of the invention from

two parties would make identical independent inventions at nearly the same time, it actually occurs quite often.<sup>19</sup> When legitimate interference proceedings do occur, they can last many years, be very costly, and expend an incredible amount of judicial resources.<sup>20</sup> The difficulty surrounding interference proceedings is one major reason for the implementation of the America Invents Act.

#### B. Globalization of Patent Rights

Over the past century, and especially within the last few decades, patent rights have become exponentially more global as world economies have become more integrated.<sup>21</sup> Among several others, three international agreements account for a large portion of this global harmonization: the

20. See Martin, supra note 17, at 438–39 ("[t]he length and complexity of interference proceedings can also be startling. Although many interference proceedings settle, others last for years, even decades."); see also Hyatt v. Boone, 146 F.3d 1348, 1352 (Fed. Cir. 1998) (an example of an interference proceeding that lasted twenty-eight years). "One commentator suggests that the *Hyatt v. Boone* interference led to the appointment of an advisory commission whose 1992 recommendations included a proposal for the United States to adopt a first-to-file rule of priority." Martin, supra note 17, at 438 n.10 (citing FRED WARSHOFSKY, THE PATENT WARS: THE BATTLE TO OWN THE WORLD'S TECHNOLOGY 60–61 (1994)).

the actual inventor and file a patent application. If the true inventor then filed a patent application, a conflict similar to the "patent of importation" scenario arises. However, here the result might logically depend on the motives of the "true" inventor. Sound policy might deny a government-sanctioned monopoly to a true inventor who had no intention of placing the technology in the public domain until after someone else had done so.

Oppenheimer, *supra* note 16, at 449-50.

<sup>19. &</sup>quot;To anyone unfamiliar with patent law, the frequency with which such disputes occur may be startling. Sixty-four interference proceedings were pending at the end of 2008, with sixty-six declared in the same year." Martin, *supra* note 17, at 438 (citing USPTO Board of Patent Appeals and Interferences, Process Production Report, U.S. PATENT & TRADEMARK OFFICE (2008), http://www .uspto.gov/go/dcom/bpai/docs/process/ fy2008.htm (last visited Feb. 2, 2009)). But in terms of the overall scheme of the application system, interferences are rare. *See* Oppenheimer, *supra* note 16, at 449 n.9. "[T]he most recent available U.S. Patent Office statistics (for 2001) indicate that less than 0.05% of patent applications involve multiple claimants to the same invention. In that year there were 345,732 applications, while around 136 interferences were declared between applications claiming the same invention. Interferences are reported on a fiscal year basis: there were 136 in fiscal 2000 and 124 in fiscal 2001. It may be objected that it takes time for an interference to be declared, so the comparison should be between 2001 interferences and an earlier year's applications.'." *Id.* (internal citations omitted).

<sup>21.</sup> See Dongwook Chun, Patent Law Harmonization in the Age of Globalization: The Necessity and Strategy for a Pragmatic Outcome 1 (Cornell Law Sch. Inter-University Graduate Student Conference Papers, Paper 45, 2011), available at http://scholarship.law.cornell.edu/lps\_clacp/ 45; see also MERGES & DUFFY, supra note 7, at 54 (stating that "while patents are territorial, trade is global— and has been for centuries. Inventors thus have an incentive to seek worldwide protection for their inventions.").

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Paris Convention, the EPC, and the Trade Related Aspects of Intellectual Property ("TRIPS Agreement").<sup>22</sup>

The 1883 Paris Convention for the Protection of Industrial Property was the first initiative to globalize patent rights.<sup>23</sup> Substantively, it provided that each country recognize the patent rights that a citizen has in his respective country.<sup>24</sup> The major role of the Convention, however, was procedural.<sup>25</sup> The divergent rules for obtaining patent protection in each country under the Convention eventually led to the call for further harmonization as economies became more global.<sup>26</sup>

The EPC was created to reduce the burden on applicants seeking to obtain transnational protection.<sup>27</sup> It first established the EPO, which performs the administrative tasks of searching for prior art, examining applications, and determining the overall patentability of the art claimed by an application.<sup>28</sup> If the EPO determines under its body of law that the applicant should be issued a patent, his patent is then recognized in all EPC countries, and no further filing is required.<sup>29</sup> The EPC ultimately "ensure[d] that the [European] states could guarantee such protection through a single procedure and standard rules that issues and governs patents."<sup>30</sup>

While the Paris Convention and EPC were primarily focused on creating a uniform system for applying for and receiving patents—socalled patent prosecution—the international business community would

*Id.*; *see also* Paris Convention for the Protection of Industrial Property art. 4, Mar. 20, 1883, 828 U.N.T.S. 305. Article 4(A)(2) provides that "[a]ny filing that is equivalent to a regular national filing under the domestic legislation of any country of the Union or under bilateral or multilateral treaties concluded between countries of the Union shall be recognized as giving rise to the right of priority."

26. See MERGES & DUFFY, supra note 7, at 55; see also Chun, supra note 21, at 23.

27. MERGES & DUFFY, *supra* note 7, at 55; *see also* Convention on the Grant of European Patents (European Patent Convention), Oct. 5, 1973, 1065 U.N.T.S. 199 [hereinafter EPC], *available at* http://www.european-patent-office.org/legal/epc/e/mal.html. The Patent Cooperation Treaty passed around the same time was a less dramatic solution to aid in reducing the application burden for transnational protection. MERGES & DUFFY, *supra* note 7, at 55.

28. MERGES & DUFFY, *supra* note 7, at 56.

29. Id.

<sup>22.</sup> See generally MERGES & DUFFY, supra note 7, at 54–63.

<sup>23.</sup> Id. at 54.

<sup>24.</sup> Id.

<sup>25.</sup> It states:

For utility patents, the Convention creates a uniform one-year rule of priority commencing with the first patent application filed in any Convention country. During the one year period, the inventor may file patent applications on the same invention in other Convention Countries, and those subsequent applications will be treated for purposes of priority as if they have been filed when the first application was filed in a Convention country.

<sup>30.</sup> Chun, supra note 21, at 44.

soon shift its focus to overall harmonization of international patent law.<sup>31</sup> Harmonization involves "creating uniform substantive standards of intellectual property protection."<sup>32</sup> This was achieved in the Uruguay Round negotiation of the TRIPS agreement.<sup>33</sup> The TRIPS agreement substantively changed United States patent law in several ways<sup>34</sup> and, since the passing of the TRIPS agreement, proposed legislation involving international patent harmonization, such as the America Invents Act, has and will continue to grow.<sup>35</sup>

#### C. Protection Under the European Patent Convention

The system for determining the patentability of an invention in European countries is governed by the European Patent Convention.<sup>36</sup> The organizational structure under the EPC shares some similarities to that of the historical American system, but is markedly different in several ways. The EPC acts as a body of law under the European Patent Office to allow the filing of a patent in a central office for all European member countries. When a European inventor from any member country files in the EPO, that filing date is effective in all EPC countries.<sup>37</sup> This, of course, differs

*Id.*; *see also* Agreement on Trade-Related Aspects of International Property Rights art. 31, Apr. 15, 1994, 1869 U.N.T.S. 299 [hereinafter TRIPS]. This was in response to the perceived inadequacies of the World Intellectual Property Organization ("WIPO") by the business community in the United States and Europe. MERGES & DUFFY, *supra* note 7, at 57.

<sup>31.</sup> MERGES & DUFFY, supra note 7, at 56.

<sup>32.</sup> Id.

<sup>33.</sup> Id. Among other things, the agreement required all members of the World Trade Organization to:

<sup>(1)</sup> include virtually all important commercial fields within the ambit of patentable subject matter, a major change for those countries that have traditionally refused to enforce pharmaceutical patents on public health/access grounds;

<sup>(2)</sup> test patent applications for the presence of an "inventive step" and "industrial application," which are expressly defined as synonymous with the U.S. requirements of, respectively, nonobviousness and utility;

<sup>(3)</sup> include in the patentees' bundle of rights the exclusive right to import the invention; and

<sup>(4)</sup> curtail the practice of granting compulsory licenses for patented technology, by (1) requiring a good faith attempt to license voluntarily, (2) limiting duration, (3) requiring

termination if conditions change, and (4) requiring compensation, subject to judicial review.

<sup>34.</sup> See MERGES & DUFFY, supra note 7, at 58–63.

<sup>35.</sup> See id. at 63–66.

<sup>36.</sup> EPC, supra note 27.

<sup>37.</sup> See European Patents—The Basics, MEWBURN ELLIS (2012), http://www.mewburn.com/ library/information-sheets/european-patents-the-basics. A European inventor may choose either to file in his country of citizenship in which case he is granted patent protection within this country only. Alternatively, a citizen of any country within the EPC may file once in the EPC, selecting certain member countries in which to be given protection as of the filing date of the EPC. The inventor will garner protection in each country selected as of the single EPC filing date and will be required to pay a

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from filing in the United States, in which patent protection is only effective in the United States.<sup>38</sup>

The EPC priority mirrors the typical first-to-file priority system.<sup>39</sup> If two independent inventors create the same invention, priority is awarded to the first inventor to file so long as that application eventually publishes.<sup>40</sup> In this way, an inventor who conceives of a new invention prior to conception of a different, independent inventor will be excluded from practicing his invention if the subsequent inventor first files an application for patent.<sup>41</sup> Prior to the America Invents Act, the United States Patent Act awarded priority to the second inventor, so long as he first reduced his invention to practice or was diligent in reducing his invention to practice up to his filing date.<sup>42</sup>

The EPC's novelty provision is similar to the United States', both historically and under the America Invents Act, in that it only allows patents for new inventions that are not part of the prior art.<sup>43</sup> In defining the state of the prior art, however, Article 54(2) adds that "the state of the art shall be held to comprise everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application."<sup>44</sup> This language is much more general than the historical novelty provision of the American Patent Act.<sup>45</sup> Yet the inability to patent an invention which has already

fee for each state he chooses. *See id.* This protection in selected member countries under a single filed application is similar to the worldwide Patent Cooperation Treaty (PCT), in which any member country may file once, demarcating his application as a PCT and selecting member countries in which to gain protection from this date by paying the appropriate fee. Patent Cooperation Treaty, June 19, 1970, 28 U.S.T. 7645, 1160 U.N.T.S. 231, *available at* http://www.wipo.int/pct/en/texts/pdf/pct.pdf.

<sup>38.</sup> See 35 U.S.C. § 154(a)(1):

Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States, and, if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States, or importing into the United States, products made by that process, referring to the specification for the particulars thereof.

<sup>39.</sup> Oppenheimer, *supra* note 16, at 461.

<sup>40.</sup> EPC Article 60(2) states, "if two or more persons have made an invention independently of each other, the right to a European patent therefor shall belong to the person whose European patent application has the earliest date of filing, provided that this first application has been published." EPC, *supra* note 27, art. 60; *see* Oppenheimer, *supra* note 16, at 461.

<sup>41.</sup> Toshiko Takenaka, *Harmony with the Rest of the World? The America Invents Act*, J. INTELL. PROP. L. & PRAC. BLOG (Nov. 13, 2011), http://jiplp.blogspot.com/2011/11/harmony-with-rest-of-world-america.html.

<sup>42.</sup> See 35 U.S.C. § 102(g).

<sup>43.</sup> EPC, *supra* note 27, art. 54 § (1).

<sup>44.</sup> Id. art. 54 § (2); see also Oppenheimer, supra note 16, at 461.

<sup>45.</sup> See 35 U.S.C. §§ 102(a)-(g) (providing very specific definitions of what is or is not included

been made public is a shared primary objective of both systems. The EPC further provides that the contents of any European application that is filed before a patent for the same invention is filed by an independent inventor acts as prior art against the subsequent filer if the first patent of the first filer is issued either before or after the second filed application.<sup>46</sup> This provision is similar to pre-America Invents Act 35 U.S.C. § 102(e) in that a pending application in which a subsequent filer has no ability to search may still act as prior art against his subsequently filed patent. The passing of the America Invents Act sought to eliminate some of these differences.

#### II. THE LEAHY-SMITH AMERICA INVENTS ACT

The America Invents Act<sup>47</sup> was passed and signed into effect September 16, 2011.<sup>48</sup> In passing the Act, Congress sought to better clarify

in the prior art for novelty considerations).

<sup>46.</sup> *See* EPC, *supra* note 27, art. 54(3) (stating, "the content of European patent applications as filed, the dates of filing of which are prior to the date referred to in paragraph 2 and which were published on or after that date, shall be considered as comprised in the state of the art").

<sup>47. 35</sup> U.S.C. § 102 is amended to read:

<sup>(</sup>a) Novelty; Prior Art. A person shall be entitled to a patent unless-

<sup>(1)</sup> 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

<sup>(2)</sup> 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.

<sup>(</sup>b) Exceptions .---

<sup>(1)</sup> Disclosures made 1 year or less before the effective filing date of the claimed invention. A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) if—

<sup>(</sup>A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

<sup>(</sup>B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.

<sup>(2)</sup> Disclosures appearing in applications and patents. A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

<sup>(</sup>A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;

<sup>(</sup>B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

<sup>(</sup>C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.

the patent priority system by switching from a first-to-invent to a first-to-file system:

It is the sense of the Congress that converting the United States patent system from "first to invent" to a system of "first inventor to file" will promote the progress of science and the useful arts by securing for limited times to inventors the exclusive rights to their discoveries and provide inventors with greater certainty regarding the scope of protection provided by the grant of exclusive rights to their discoveries.<sup>49</sup>

It then added that a primary goal of the change was to harmonize the United States priority system with first-to-file systems represented in nearly every other industrialized country in the world:

It is the sense of the Congress that converting the United States patent system from "first to invent" to a system of "first inventor to file" will improve the United States patent system and promote harmonization of the United States patent system with the patent systems commonly used in nearly all other countries throughout the world with whom the United States conducts trade and thereby promote greater international uniformity and certainty in the procedures used for securing the exclusive rights of inventors to their discoveries.<sup>50</sup>

It is first necessary to discuss the important changes to United States patent law derived from the America Invents Act in order to determine if these changes did in fact promote the harmonization of the U.S. patent system with the rest of the world as viewed through the EPC.

#### A. America Invents Act Sections 102(a)(1) and (b)(1)

The America Invents Act effectively eliminates 35 U.S.C. § 102 and amends it under new §§ 102(a) and 102(b). Section 102(a)(1) now states that "a person shall receive a patent unless . . . the claimed invention was

<sup>35</sup> U.S.C. § 102 (2011).

<sup>48.</sup> 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).

<sup>49.</sup> Leahy-Smith America Invents Act, § 3(0), Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended at 35 U.S.C. § 102) [hereinafter America Invents Act].

<sup>50.</sup> Id. § 3(p).

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."<sup>51</sup> Section 102(b)(1) provides an exception to § 102(a)(1) by stating:

A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) if—

(A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.<sup>52</sup>

The first important change to notice between the new Act and the old Act is that the America Invents Act lacks the geographic restriction present in §§ 102(a) and (b) of the old Act.<sup>53</sup> This entails that all activity prescribed in § 102(a)(1) is prior art and therefore bars patentability if the activity takes place anywhere in the world.<sup>54</sup> Although there is seemingly no change between prior art patents and publications, after the America Invents Act, prior public use and prior sale will now bar patentability if this activity is conducted outside of the United States, so long as it does not fall within the prescribed exception in § 102(b)(1).<sup>55</sup> Because prior public use and prior sale of the claimed invention are now considered prior

<sup>51.</sup> America Invents Act (codified as amended at 35 U.S.C. § 102(a)).

<sup>52.</sup> Id. (codified as amended at 35 U.S.C. § 102(b)).

<sup>53.</sup> See 35 U.S.C. §§ 102(a)-(b); see also America Invents Act (codified as amended at 35 U.S.C. §§ 102(a)-(b)). The pre-America Invents Act § 102(a) required prior knowledge or use of an invention before independent invention by a third party to occur in the United States to count as prior art against the patent. 35 U.S.C. § 102(a). Likewise, the pre-America Invents Act § 102(b) required public use or the sale of the invention to occur within the United States more than one year prior to the inventor's filing date to bar him from obtaining a patent. Id. § 102(b). It is also worth noting that the pre-America Invents Act § 102(g)(2) contained a geographic restriction that limited prior invention outside of interference proceedings to have occurred in the United States to be considered prior art. Id. The America Invents Act implicitly eliminated this geographic restriction by removing § 102(g) altogether. See America Invents Act § 3.

<sup>54.</sup> See America Invents Act § 3 (codified as amended at 35 U.S.C. § 102(a)).

<sup>55.</sup> See id. (codified as amended at 35 U.S.C. § 102(b)(1)).

art when conducted outside of the United States, these provisions expand the scope of prior art, further increasing the burden on patentability.<sup>56</sup>

Two more key changes can be observed from § 102(a)(1) and the exception under § 102(b)(1) as amended by the America Invents Act. First, the language "otherwise available to the public before the effective filing date" has been added to the list of prior art.<sup>57</sup> This added phrase extends prior art for barring patentability to any publicly available disclosure anywhere in the world prior to the applicant's filing date.<sup>58</sup> Second, § 102(b)(1) completely alters what disclosures that preserve patentability of invention are acceptable prior to the filing date.<sup>59</sup>

Applicants' own publication or disclosure that occurs within 1 year prior to filing will not act as prior art against their applications. Similarly, disclosure by others during that time based on information obtained (directly or indirectly) from the inventor will not constitute prior art. This 1-year grace period should continue to give U.S. applicants the time they need to prepare and file their applications.<sup>60</sup>

An issue remains, however, as to whether a sale or public use of the invention by the inventor within one year of his effective filing date constitutes a "disclosure" for purposes of 102(b)(1).<sup>61</sup> If neither of these

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<sup>56.</sup> See USPTO, AMERICA INVENTS ACT: POTENTIAL ITEMS FOR PATENTS 2 (July 22, 2011), available at http://www.uspto.gov/patents/init\_events/patents\_items.pdf (describing the elimination of geographic restriction to the U.S.) [hereinafter USPTO COMMENTS]; see also H.R. REP. No. 112-98, pt. 1, at 42–43 (2011).

<sup>57.</sup> See USPTO COMMENTS, *supra* note 56, at 1 (explaining that "[o]therwise available to the public" is added language for prior art consideration).

<sup>58.</sup> See H.R. REP. NO. 112-98, pt. 1, at 42–43. The Committee Report stated that the purpose of this newly added language would be "to clarify the broad scope of relevant prior art, as well as to emphasize the fact that it must be publicly accessible." *Id.* These statements imply that the added language will have no actual change on what is considered prior art, but are broad nevertheless.

<sup>59.</sup> See 35 U.S.C. §§ 102(a)–(b). The old § 102(b) exception provided a grace period of one year prior to the date of the United States filing in which a prior patent or publication anywhere in the world, or sale or prior use by anyone in the United States within one year of the U.S. filing, would not bar patentability. *Id.*; see also America Invents Act § 3(b) (codified as amended at 35 U.S.C. §§ 102(a)(1), (b)(1)).

<sup>60.</sup> H.R. REP. No. 112-98, pt. 1, at 42. It is also important to note that the effective filing date for determining prior art may now be taken from a foreign priority claim in determining the grace period. *See* USPTO COMMENTS, *supra* note 56, at 1. Therefore, if priority of a U.S. filed application is taken from a foreign filing, then the one-year grace period begins not from the U.S. application date, but rather from the foreign filing date. *Id*. This change can provide a considerable amount of extra time from when a disclosure under § 102(a)(1) is made and when it becomes prior art against the inventor. *See id*.

<sup>61.</sup> See Ron D. Katznelson, Section 2 of America Invents Act Will Deny Inventors U.S. Patent Protection That Would Not Be Denied Under Foreign Patent Laws (Mar. 6, 2011), available at http://bit.ly/Grace-Period-USA.

activities is considered a public disclosure, then presumably any prior use or commercial activities by inventors within the statutory grace period prior to filing will result in the loss of patentability.<sup>62</sup> Sections 102(a)(2) and (b)(2) provide additional requirements for patentability.

#### B. America Invents Act Sections 102(a)(2) and (b)(2)

The second novelty provision in the America Invents Act, codified at 102(a)(2), states:

[a] person shall be entitled to a patent unless... 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.<sup>63</sup>

This provision also has an exception under 102(b)(2):

A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

(A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;

<sup>62.</sup> See id. Katznelson argues:

Current U.S. law provides an unconditional one-year grace period. Although under [America Invents Act] there are exceptions in proposed subsection 102(b) that excuse public disclosures by the inventor if made less than a year before filing, they are irrelevant here, as no disclosure is involved in mere public use or sale. A "disclosure" must enable those skilled in the art to practice the invention. Construing the term "disclosure" in the exceptions of [America Invents Act] differently—as including acts of public use and offers for sale from which no proof can be adduced that the inventor in fact had "possession" of the claimed invention-would contradict the fundamental constitutional directive for a patent grant. This is because under such construction, the exceptions would enable parties to obtain patents for prophesized subject matter yet to be invented. Hence, public use or sale, per se, cannot mean "disclosures" and therefore do not trigger [America Invents Act's] exceptions which provide grace . . . As such, this provision will kill startups' ability to launch their commercial existence. It upsets two centuries of expertise in founding, marketing, financing and building new technology companies. Often, it is impossible to file an application that describes a workable invention early before its public use or offer for sale. In many cases, the public-use is necessarily the very first event that tests and validates an inventive solution worth protecting in a patent application. In these cases, public-use is an integral part of the development process and the business practice that facilitates development. In these cases, a patent would be barred under [America Invents Act].

Id. at 1 (emphasis in original).

<sup>63.</sup> See America Invents Act § 3.

(B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.<sup>64</sup>

The novelty provision under § 102(a)(2) is fairly straightforward. An earlier filed application of the same invention by another inventor whose effective filing date is prior to that of the applicant will bar the applicant's patent.<sup>65</sup> There are three exceptions to the earlier filed application as prior art: (1) if the invention in the earlier filed application by another is derived from the applicant; (2) if the inventor, joint inventor, or another who derived the invention from the inventor disclosed the invention prior to the prior filing; or (3) if there is common ownership between the earlier filed application and that which is seeking protection.<sup>66</sup>

#### C. First-Inventor-To-File Under the America Invents Act

The largest substantive change legislated by the America Invents Act is from a first-to-invent priority system to a first-inventor-to-file priority system.<sup>67</sup> This change is illustrated through post-America Invents Act §§ 102(a) and 102(b).<sup>68</sup> These sections reflect two major changes from the pre-America Invents Act § 102. First is the complete elimination of § 102(g) in the consideration of prior art.<sup>69</sup> The elimination of this section means that, under the new law, a first inventor that conceives of an invention and works diligently to reduce it to practice will concede priority to a subsequent inventor who works diligently to reduce the invention to

64. Id.

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<sup>65.</sup> See H.R. REP. No. 112-98, pt. 1, at 43; see also America Invents Act § 3 (codified as amended at 35 U.S.C. § 102(a)(2)). This section is analogous to § 102(e) of the old act. See 35 U.S.C. § 102(e).

<sup>66.</sup> See America Invents Act § 3.

<sup>67.</sup> See H.R. REP. NO. 112-98, pt. 1, at 42.

<sup>68.</sup> See America Invents Act § 3.

<sup>69.</sup> See generally Ryan Grant, All Inventors!—The Race Is About to Begin. On Your Mark! Get Set! Go....., 14 NEB. LAW. 5 (2011) (discussing the first-to-file effects of the America Invents Act and how its elimination of the 102(g) first-to-invent section will result in a race to the patent office to establish priority).

practice, but files his patent application first.<sup>70</sup> The second change is moving the critical date for determining prior art in §§ 102(a) and 102(e) of the pre-America Invents Act from the date of invention to the effective filing date.<sup>71</sup> This change eliminates the inventor's ability to swear behind certain prior art, including patent applications from old § 102(e) and patents, publications, knowledge, and public use from old § 102(a).<sup>72</sup> Because inventors can no longer rely on their dates of invention, it is imperative that they file as quickly as possible in order to minimize the risk that their invention becomes publicly available or, even worse, that they are barred from practicing their invention due to the earlier filing of a subsequent inventor.<sup>73</sup> Moreover, the House of Representatives provides an additional list of strong arguments for the change to first-to-file.<sup>74</sup>

70. See id. at 7. Grant provides a highly illustrative example of this point:

71. See H.R. REP. NO. 112-98, pt. 1, at 42-43.

72. See USPTO COMMENT, supra note 56, at 1; see also H.R. REP. No. 112-98, pt. 1, at 42 ("This provision also, and necessarily, modifies the prior-art sections of the patent law. Prior art will be measured from the filing date of the application and will typically include all art that publicly exists prior to the filing date, other than disclosures by the inventor within 1 year of filing."). "[I]n a first-to-invent system, the date the invention claimed in the application was actually invented is the determinative date. Unlike the objective date of filing, the date someone invents something is often uncertain, and, when disputed, typically requires corroborating evidence as part of an adjudication." *Id.* at 40.

73. See generally Grant, supra note 69.

74. See H.R. REP. NO. 112-98, pt. 1, at 42.

There are significant, practical differences between the two systems. Among them is the ease of determining the right to a claimed invention in the instance in which two different people file patent applications for the same invention. In a first-to-file system, the application with the earlier filing date prevails and will be awarded the patent, if one issues. In the first-to-invent system, a lengthy, complex and costly administrative proceeding (called an 'interference proceeding') must be conducted at the United States Patent and Trademark Office ("USPTO") to determine who actually invented first. Interference proceedings can take years to complete (even if there is no appeal to the United States Court of Appeals for the Federal Circuit), cost hundreds of thousands of dollars, and require extensive discovery. In addition, because it is always possible that an applicant could be involved in an interference proceeding, companies must maintain extensive recording and document retention systems in case they are later required to prove the date they invented the claimed invention.

Id. at 40-41.

<sup>[</sup>A]ssume . . . that Peter conceives of [a] new microwave container on January 1, 2011. Peter works diligently from January 1, 2011, until February 1, 2011, to prepare a patent application. Peter ultimately files his patent application on February 1, 2011. Further assume that Marie independently conceived of the same microwave container on January 15, 2011, 15 days after Peter. Marie also diligently files a patent application. Yet, Marie files before Peter on January 28, 2011. Under the proposed first-to-file system, Peter is out of luck. There is no ribbon for second place—*Marie is entitled to the patent even though Peter conceived of the idea first*.

Id.

#### III. COMPARING PATENT PRIORITY UNDER THE EPC WITH PRIORITY UNDER THE LEAHY-SMITH AMERICA INVENTS ACT

In passing the Leahy-Smith America Invents Act, it was the intent of Congress to better harmonize the United States patent priority system with nearly every other industrialized nation.<sup>75</sup> The EPO, being one of the largest central filing offices,<sup>76</sup> provides a strong comparison of the de facto level of international harmonization achieved by the America Invents Act.

#### A. Geographic Scope of Public Use Sale and Availability

One major change implemented by the America Invents Act that can be observed through facial comparison to the old statute is that prior use, sale, or availability of an invention is no longer restricted to the United States in order to bar patentability of the invention.<sup>77</sup> This change invariably burdens the inventor in gaining patent protection in the United States by broadening the state of the prior art that may be used against him to encompass worldwide consideration.<sup>78</sup>

The European Patent Convention similarly lacks a geographic restriction. Under Article 54(2) of the EPC, the state of the prior art is held to comprise "everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the European patent application."<sup>79</sup> Inherent in these words, the scope of prior art under the EPC insists that an invention possess "absolute novelty" before further consideration will be given to the invention's patentability.<sup>80</sup> In other words, an invention seeking protection under the EPC must not: (1) have been publically described either orally or through

78. See H.R. REP. NO. 112-98, pt. 1, at 42-43.

79. EPC, supra note 27, art. 54(2).

80. See Risto Sarvas & Aura Soininen, Differences In European and U.S. Patent Regulation Affecting Wireless Standardization 13 (Helsinki Inst. for Info. Tech. Oct. 15–16, 2002), available at http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.203.3590&rep=rep1&type=pdf.

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<sup>75.</sup> *Id.* at 8. "The 'America Invents Act' creates a new 'first-inventor-to-file' system. Every industrialized nation other than the United States uses a patent priority system commonly referred to as 'first-to-file." *Id.* at 40.

<sup>76.</sup> See WIPO, WORLD PATENT REPORT: A STATISTICAL REVIEW 7 (2008) (explaining that although the United States Patent and Trademark Office and Japanese Patent Office receive the greatest number of yearly filings, the European Patent Office ranks fifth).

<sup>77.</sup> See America Invents Act § 3. Prior public knowledge that was previously restricted to the United States has been wholly removed as a bar to patentability from the America Invents Act and replaced with "otherwise available to the public." *Id.*; *see also* H.R. REP. NO. 112-98, pt. 1, at 42–43 (the House Report stating that "in section 102 the 'in this country' limitation as applied to 'public use' and 'on sale' is removed, and the phrase 'available to the public' is added to clarify the broad scope of relevant prior art, as well as to emphasize the fact that it must be publicly accessible.").

writing; (2) publically used; or (3) otherwise made publically available anywhere in the word prior to the inventor's filing date.<sup>81</sup>

Eliminating the geographic restriction of prior art furthers the stated purpose disclosed in the legislative history of the America Invents Act of harmonizing the United States' patent system with that of the rest of the world.<sup>82</sup> Prior to passing the America Invents Act, several activities, when conducted outside of the United States, did not result in a bar to patentability in the United States, but did under the EPC.<sup>83</sup> In a world market, this discrepancy allowed inventors to commercially or publicly exploit their inventions in countries outside of the United States for significant periods while maintaining the ability to patent their inventions in the United States if a threat to patentability later arose.<sup>84</sup> By eliminating the geographic restriction in the America Invents Act, inventors can no longer take advantage of their inventions outside the United States while preserving their statutory rights to file in the United States at a later date. This broadening of scope of prior art brings the state of the prior art in the United States more in line with that of the EPC.

#### B. Grace Period

The so-called "grace period" embedded in the pre-America Invents Act § 102 allowed an inventor to publicly use his invention or place his invention "on sale" for up to one year prior to filing a patent.<sup>85</sup> This grace period gave inventors the opportunity to test the market for their inventions for a limited period prior to deciding whether to spend the capital necessary to gain patent protection.<sup>86</sup> The wording of the one-year

<sup>81.</sup> See id. at 14.

<sup>82.</sup> See id. at 10.

<sup>83.</sup> See *id.* at 14. For example, prior to the America Invents Act, an inventor could commercially exploit his invention outside the United States any time more than one year prior to filing in the United States and still be granted patent protection in the United States. *See id.* at 14–15. On the other hand, that same inventor could not obtain patent protection under the EPC because he made his invention publicly available prior to filing anywhere in the world. *Id.* 

<sup>84.</sup> One could imagine a situation in which an inventor commercially exploited his invention for several years in major markets outside the United States prior to filing within the United States. Although this commercial activity would bar patentability in many countries, including under the EPC, this activity would not trigger the § 102(b) bar that prohibits placing the invention on sale in the United States for more than one year prior to filing in the United States. *See* 35 U.S.C. § 102(b). So long as the invention had not been placed on sale in the United States, the inventor could sell his invention outside of the United States while preserving his ability to file in the United States for up to one year before it is first placed on sale in the United States.

<sup>85.</sup> See 35 U.S.C. § 102(b).

<sup>86.</sup> See Katznelson, supra note 61, at 1. Katznelson explains that the grace period especially assists small inventors and startups to grow economically by allowing them to test the waters of their

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grace period changed significantly, however, with the passing of the America Invents Act.<sup>87</sup> Yet it was Congress' intent to keep the grace period intact after educational institutions and small business inventors lobbied Congress, claiming that the grace period was necessary to commercially exploit their inventions in order to make initial projections whether profitability would cover patent costs.<sup>88</sup>

There are several differences on the face of the statute between the United States' grace period and that of the EPC.<sup>89</sup> Section 102(a)(1) of the America Invents Act bars patentability of a claimed invention if it is on sale or in public use before the effective filing date of the invention.<sup>90</sup> Section 102(b)(1) provides for certain exceptions when the inventor makes a "disclosure" within one year of filing.<sup>91</sup> It specifically provides for an exception if the subject matter was disclosed by the inventor, a joint inventor, or someone that derived it from the inventor.<sup>92</sup> EPC Article 55 provides a similar exception to its first-to-file system excluding what it deems "non-prejudicial disclosures" when the disclosure was made within six months of filing and was either "an evident abuse in relation to the

inventions before funneling limited resources into patent prosecution to protect an invention that may not have much commercial value. *Id*.

<sup>87.</sup> Compare America Invents Act § 3 (codified as amended at 35 U.S.C. §§ 102(a)(1), (b)(1)) with pre-America Invents Act § 102(b).

<sup>88.</sup> H.R. REP. NO. 112-98, pt. 1, at 41 (2011).

Another important difference between the two systems is that in some first-to-file systems, prior art can include the inventor's own disclosure of his invention prior to the filing date of his application. Such systems do not provide the inventor any grace period during which time he is allowed to publish his invention without fear of its later being used against him as prior art. The Committee heard from universities and small inventors, in particular, about the importance of maintaining that grace period in our system. They argued that the grace period affords the necessary time to prepare and file applications, and in some instances, to obtain the necessary funding that enables the inventor to prepare adequately the application. In addition, the grace period benefits the public by encouraging early disclosure of new inventions, regardless of whether an application may later be filed for a patent on it.

*Id.* 89. EPC Article 55 reads:

For the application of Article 54, a disclosure of the invention shall not be taken into consideration if it occurred no earlier than six months preceding the filing of the European patent application and if it was due to, or in consequence of:

<sup>(</sup>a) an evident abuse in relation to the applicant or his legal predecessor, or

<sup>(</sup>b) the fact that the applicant or his legal predecessor has displayed the invention at an official, or officially recognized, international exhibition falling within the terms of the Convention on international exhibitions signed at Paris on 22 November 1928 and last revised on 30 November 1972.

EPC, *supra* note 27, art. 55(1)(a)–(b).

<sup>90.</sup> America Invents Act (codified as amended at 35 U.S.C. § 102(a)(1)).

<sup>91.</sup> Id. § 102(b)(1).

<sup>92.</sup> Id. § 102(b)(1)(A).

applicant or his legal predecessor" or displayed at an international convention sanctioned under the EPC.<sup>93</sup> This EPC exception is much narrower than the exception under the America Invents Act, both temporally and in allowing only very limited disclosures to qualify.<sup>94</sup>

The America Invents Act, however, goes on to provide another exception wholly absent from the EPC. It provides that if the subject matter disclosed (by another) was first disclosed publicly by the inventor, a joint inventor, or someone that derived it from the inventor within one year prior to filing, then the invention remains patentable.<sup>95</sup> This exception effectively creates a one-year grace period in which, if another inventor discloses the same invention before the patentee's filing, the patentee may still file, provided that the patentee first disclosed the invention.<sup>96</sup> If this disclosure by another is in the form of a patent application and the current applicant can prove that he publicly disclosed his invention prior to the other's filing, the applicant will presumably have priority. This section effectively confers a first-to-invent exception for a twelve-month grace period prior to the inventor's filing, differentiating the United States' patent priority system from a true first-to-file system like that observed in the European Patent Convention.<sup>97</sup>

#### C. Prior Art Considerations

The America Invents Act broadened the scope of prior art considerations by including references up to the inventor's effective filing date.<sup>98</sup> References qualifying under the new Act include prior patents, publications, prior public use, placing the invention on sale, or making the invention "otherwise available to the public."<sup>99</sup> It goes further to include patent applications for the invention filed before the effective filing date of the claimed invention, even though that application is not made public

<sup>93.</sup> EPC, *supra* note 27, art. 55(1)(a)–(b).

<sup>94.</sup> While the EPC only considers disclosures up to six months prior to filing, the America Invents Act considers disclosures up to twelve months prior to filing. *Compare* America Invents Act § 3 (codified as amended at 35 U.S.C. § 102(b)(1)) with EPC art. 55(1). Moreover, the EPC limits qualifying disclosures to two narrow types whereas the America Invents Act has no limitation on disclosure type. *Id*.

<sup>95.</sup> America Invents Act (codified as amended at 35 U.S.C. § 102(b)(1)(B)).

<sup>96.</sup> Id.

<sup>97.</sup> It should also be noted that nowhere in the America Invents Act does Congress define "disclosure." For an argument that "public use" and "on sale" do not constitute "disclosures" under the America Invents Act, thereby eliminating the most important practical aspects of the pre-America Invents Act grace period, *see generally* Katznelson, *supra* note 61.

<sup>98.</sup> See America Invents Act (codified as amended at 35 U.S.C. §§ 102(a)(1)-(2)).

<sup>99.</sup> Id. § 102(a)(1).

prior to the inventor's effective filing date, so long as the application is published within eighteen months of filing or issues as a patent.<sup>100</sup>

Although the legislative changes in prior art implemented by the America Invents Act bring the United States patent priority system more in line with the EPC by moving the effective date to the time of filing,<sup>101</sup> the two systems differ in several respects. First, while both the America Invents Act and EPC discuss prior art inventions as those made available to the public, the America Invents Act goes on to explicitly suggest inventions "on sale" and "in public use" prior to the inventor's effective filing date are prior art.<sup>102</sup> Because Congress did not expressly reject the case law discussing what constitutes an invention being on sale or in public use, it is likely that prior case law defining these terms will still apply.<sup>103</sup> Therefore, activity that likely will not be considered prior art under the EPC will still be considered prior art under America Invents Act.

Additionally, under the America Invents Act, prior filed applications count as prior art from their effective filing dates.<sup>104</sup> The EPC, on the other hand, only allows prior filed applications to qualify as prior art if they are filed in the European Patent Office.<sup>105</sup> Consequently, by giving priority from the effective filing date, the America Invents Act allows prior inventors to claim priority from foreign applications or applications filed under the Patent Cooperation Treaty, while the EPC requires the claim to priority to stem from an application filed in its own office.<sup>106</sup> The deviation between these two laws effectively provides a greater body of

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<sup>100.</sup> Id. § 102(a)(2).

<sup>101.</sup> See generally id. § 102; see also EPC, supra note 27, art. 54.

<sup>102.</sup> See America Invents Act (codified as amended at 35 U.S.C. § 102(a)(1)).

<sup>103.</sup> *See, e.g.*, Metallizing Engineering Co., Inc. v. Kenyon Bearing & Auto Parts Co., Inc., 153 F.2d 516 (2d Cir. 1946) (offering an invention for sale when it is ready for patenting qualifies as "on sale").

<sup>104.</sup> America Invents Act (codified as amended at 35 U.S.C. § 102(a)(2)).

<sup>105.</sup> *EPC*, art. 54(3). This section states that "the content of European patent applications as filed, the dates of filing of which are prior to the date referred to in paragraph 2 and which were published on or after that date, shall be considered as comprised in the state of the art." *Id*.

<sup>106.</sup> See 35 U.S.C. § 119 (2011). The statute provides for an effective filing date based on prior foreign applications. *Id.* Under § 102(a)(2) as amended by the America Invents Act, an applicant can be precluded from obtaining a patent for his invention if another inventor files an application in the United States after the applicant, but obtains an effective filing date from a foreign application, or an application filed under the PCT that is filed prior to the applicant's U.S. filing date. *Id.* This section differs from the pre-America Invents Act section regarding a prior filed application, which only grants a priority date from the time it was filed in the United States. *See* 35 U.S.C. § 102(e); *see also In Re* Hilmer, 359 F.2d 859 (C.C.P.A. 1966). This holding will likely be overturned by the America Invents Act.

prior art that may be used against a U.S. applicant than that of an applicant under the EPC, and it again fails to harmonize the two systems.<sup>107</sup>

#### CONCLUSION

The America Invents Act's ultimate goal was to change the United States patent priority system to a first-to-file system in order to harmonize the United States system with that of the rest of the world. Although the Act achieved this result to some extent by eliminating the geographic restriction of certain prior art, the Act failed to extend the same grace period and prior art considerations as that of foreign systems such as the European Patent Convention.

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<sup>107.</sup> The U.S. applicant will potentially be precluded from patent protection based on priority claims from applications for the same invention filed anywhere in the world prior to his U.S. filing date under certain restrictions. On the other hand, the applicant filing under the EPC only has the possibility of being precluded by prior applications filed only under the EPC. *See* EPC, *supra* note 27, art. 54(3).

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