

## **America Invents Act: Race to the Patent Office, Where More Prior Art Awaits**

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### **I. Introduction**

On March 16, 2013<sup>1</sup>, the U.S. became a “first-inventor-to-file” jurisdiction similar (though not identical) to the rest of the world. Under this system, where two inventors invent the same thing, the winner of the U.S. patent will be the one who wins the “race” to the patent office. In addition, the new law changes the date when third-party patent applications, publications and disclosures are effective as prior art.

Under the new law, any third-party public disclosure, such as a publication, presentation, or offer for sale, will be available as prior art against a later-filed application as of the date of the disclosure, regardless of the proximity of the disclosure to the filing date of the application.<sup>2</sup> By contrast, under the pre-AIA law, disclosures made within one year before the filing of the application might or might not be available as prior art, depending on the date of the invention. Generally speaking, the new law applies to applications filed on or after March 16, 2013 and does not apply to applications filed before March 16, 2013.<sup>3</sup>

In addition, because the “invention” or “conception” date will no longer be relevant for post-AIA applications,<sup>4</sup> it will be impossible to “swear behind” third-party prior art by showing that the inventor invented the subject matter before the relevant prior art date.

As a result, any prior third-party disclosure, even as recent as the day before filing, will be prior art for any post-AIA application.<sup>5</sup> The practical effect of these changes will be that more prior art will be usable to reject claims during prosecution of a post-AIA application or to invalidate claims of an issued post-AIA patent during litigation.

This article explores the new law and its implications for post-AIA applications, and provides some practical examples to show how applications will be treated under the new law as contrasted with their treatment under the old, pre-AIA law. Finally, it is important to note that pre-AIA applications continue to be filed and prosecuted and patents from pre-AIA applications are issuing and being litigated. It will be necessary to understand both the new law and the old law relating to these prior art and priority issues for the foreseeable future.

### **II. Effective Date For AIA Changes to §§ 102/103<sup>6</sup>**

Pre-AIA applications, and patents issued on such applications, are subject to the pre-AIA definition of prior art (the so-called “first-to-invent” definition). Post-AIA applications, and patents issued on such applications, are generally subject to the AIA definition of prior art (the so-called “first-inventor-to-file” definition).<sup>7</sup>

This simple rule becomes complicated for transitional applications, i.e., applications filed on or after March 16, 2013, that claim priority to a pre-AIA application.<sup>8</sup> For example, a post-AIA non-provisional application can claim the benefit of a pre-AIA provisional application. A post-AIA continuation, divisional, or continuation-in-part

<sup>1</sup> As implemented by the Leahy-Smith America Invents Act of 2011 (H.R. 1249) (“AIA”).

<sup>2</sup> As discussed in this article, a grace period applies to disclosures made by or through the inventor less than one year prior to filing.

<sup>3</sup> An application filed prior to March 16, 2013, is referred to herein as a “pre-AIA application,” and an application filed on or after March 16, 2013, that does not claim priority to a pre-AIA application is referred to herein as a “post-AIA application.” An application filed on or after March 16, 2013, that claims priority to a pre-AIA application is referred to herein as a “transitional application.” The applicability of the AIA’s prior-art provisions to transitional applications is discussed in Section II below.

<sup>4</sup> An exception is the rare case of derivation of the invention by a third party.

<sup>5</sup> Unless one of the exceptions applies, as described in more detail below.

<sup>6</sup> All references to Title 35 of the United States Code and to Title 37 of the Code of Federal Regulations in this article relate to the post-AIA statute and USPTO rules unless otherwise indicated.

<sup>7</sup> H.R. 1249 § 3(n).

<sup>8</sup> 35 U.S.C. §§ 119, 120, 121, 365.

application can claim priority to a pre-AIA parent application. In addition, a post-AIA U.S. application can claim priority to a pre-AIA international (PCT) or foreign patent application.<sup>9</sup>

How are these transitional applications handled? The AIA provides that a transitional application, and any patent issuing thereon, will be treated according to the effective filing date of the claims.<sup>10</sup> The “effective filing date” of a claimed invention is defined as the filing date of the earliest patent application to which the claim is entitled to a right of priority,<sup>11</sup> i.e., the earliest patent application in the priority chain that fully supports and enables the claim as required by 35 U.S.C. § 112. If a transitional application contains at least one claim that is **not** entitled to a pre-AIA effective filing date, the entire transitional application (and any subsequent continuation or divisional applications thereof) becomes subject to the AIA definition of prior art. Introducing a claim that is not entitled to a pre-AIA filing date has a permanent effect on the transitional application (and its progeny), even if that claim is subsequently canceled.<sup>12</sup>

As a rule, continuation and divisional applications are filed without adding new matter to the specification. Accordingly, any claim supported in a continuation or divisional would also be supported in the parent application. Thus, a post-AIA continuation or divisional of a pre-AIA parent (or grandparent) would be subject to the pre-AIA definition of prior art.

Continuation-in-part (“CIP”) applications generally do add new matter, and most CIP applications include at least one claim that is not supported by the parent. Thus, most post-AIA CIP applications would be subject to the AIA definition of prior art.

Post-AIA non-provisional applications claiming the benefit of a pre-AIA provisional application(s) require careful consideration. To the extent that the provisional specification fully supports all of the claims made in the non-provisional application, the pre-AIA definition of prior art would apply. If matter is added to the non-provisional application and the added matter is claimed, then the post-AIA definition of prior art would apply. One strategy worth considering is filing a non-provisional application that includes only the subject matter of the provisional application, to obtain pre-AIA treatment for those claims; a separate non-provisional application that includes added matter can be filed and subject to post-AIA treatment.

For purposes of patent examination, the United States Patent and Trademark Office (“USPTO”) is relying on applicants to identify post-AIA applications that have a pre-AIA priority claim but nonetheless should be examined under the AIA definition of prior art. Specifically, the USPTO is requiring applicants to file a certification in such applications, to the effect that the application claims priority to a pre-AIA application but includes (or at one time did include) a claim with a post-AIA effective filing date.<sup>13</sup>

While no post-AIA patents have been the subject of litigation yet, it seems likely that failure to file a certification when required could potentially give rise to an inequitable conduct claim by an accused infringer. It can also be expected that the applicability of the AIA to a particular patent can and will be raised in litigation.

### **III. Prior Art and Exceptions Under §§ 102(a) and 102(b)**

#### **A. § 102(a)(1): Prior Art (Disclosures and Public Use)**

According to 35 U.S.C. § 102(a)(1), a claimed invention cannot be patented if “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.” Perhaps one of the most well-known aspects of the AIA is the fact that it alters the U.S. patent system from a “first-to-invent” regime to a “first-inventor-to-file” regime. Invalidating publications and activities, known as “prior art,” are therefore determined relative to the “effective filing date of the claimed invention.” Dates related to invention, such as dates of conception (i.e., the mental process of coming up with the idea) and actual reduction to practice (the physical part of making the invention and proving it useful for its intended purpose), are now no longer relevant in determining what qualifies as prior art.

<sup>9</sup> For PCT applications designating the United States, the actual U.S. filing date is the international filing date. Accordingly, PCT applications filed before March 16, 2013, will be subject to pre-AIA law upon entry into the U.S. national stage, regardless of when the U.S. national stage is entered.

<sup>10</sup> H.R. 1249 § 3(n)(1).

<sup>11</sup> 35 U.S.C. § 100(i)(1).

<sup>12</sup> Amendments to 35 U.S.C. § 102 “shall apply to any application for patent, and to any patent issuing thereon, that contains **or contained at any time** a claim with an effective filing date on or after March 16, 2013. H.R. 1249 § 3(n)(1) (emphasis added).

<sup>13</sup> 37 C.F.R. §§ 1.78(a)(6), 1.78(c)(6), 1.55(j). Note that the USPTO has not indicated whether or under what circumstances examiners can apply the AIA definition of prior art to a transitional application in the absence of a certification. The USPTO has stated only that the certifications “will assist the office” in determining the correct definition to apply. 78 Fed. Reg. 11059, 11084 (Feb. 14, 2013).

Because prior art is now determined based on the “effective filing date,” it is important to know what this date is. For many patent applications, the effective filing date is the date the application was filed. A patent application may, however, claim priority to an earlier-filed application that discloses the claimed invention, in which case the effective filing date is the filing date of the earlier-filed application.<sup>14</sup> Applications to which priority is claimed may include regular, “non-provisional” patent applications, “provisional” patent applications, certain international patent applications, and patent applications filed in a foreign country, subject to certain restrictions.<sup>15</sup> Therefore, the effective filing date of a patent application may be earlier than the patent application’s actual filing date.

The different types of prior art are specifically listed in § 102(a)(1). While the terms “patented” and “described in a printed publication” used in § 102(a)(1) are somewhat self-explanatory, there are many nuances to what activities count as a “public use” or “on sale” for prior-art purposes. Moreover, it is important to note that under the AIA, public use or sale activities occurring anywhere in the world will be considered as prior art. Previously, public use or sale activities were only considered if they occurred within the United States.<sup>16</sup>

The USPTO has interpreted the phrase “otherwise available to the public” as modifying the terms “public use” and “on sale.” Thus, “on sale” has been interpreted to be limited to public sales or public offers for sale.<sup>17</sup> A sale or offer for sale conducted under an obligation of confidentiality, therefore, would not qualify as prior art under this interpretation.<sup>18</sup>

The term “public use” is perhaps even less straightforward. For example, “public use,” a term utilized in patent law prior to the AIA, has been interpreted to occur if an invention is either accessible to the public or commercially exploited.<sup>19</sup> This means that even if the public cannot see your invention but can see the results of your invention, it may be a secret commercial use that qualifies as “public use” under patent law. The USPTO, however, has indicated that “public use” may no longer include such secret commercial use under the AIA.<sup>20</sup> Future case law will have to settle the point. For now, it may be difficult to determine which activities qualify as public use or sale for prior art purposes.

The safest way to preserve rights to patent an invention is to file a patent application for the invention—either a provisional or non-provisional—before engaging in any activities that could be considered prior art public use or sale. That said, the AIA provides some exceptions under § 102(b)(1) that can disqualify prior art would otherwise apply under § 102(a)(1).

#### **B. § 102(b)(1): Exceptions to § 102(a)(1)**

Under 35 U.S.C. § 102(b)(1) a disclosure made *one year or less* before the effective filing date of a claimed invention will not qualify as prior art under § 102(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.

In other words, a person’s disclosure of an invention cannot be used as prior art against a patent application that names that person as an inventor, as long as the effective filing date is a year or less after the disclosure was made. This also applies to disclosures made by a non-inventor who obtained the subject matter from the inventor. Such disclosures, if made public, also prevent any subsequent disclosure of the invention from being used as prior art, no matter who makes the subsequent disclosure or how the material of the subsequent disclosure was obtained.

These provisions effectively give an inventor a one-year “grace period” after disclosing an invention in which the inventor may file a patent application for the disclosed invention. Accordingly, materials and dates related to any disclosure of the invention may be helpful in showing events that may trigger the grace period. In theory, an inventor may publicly disclose an invention in order to trigger this grace period and preserve the right to file a

<sup>14</sup> 35 U.S.C. § 120.

<sup>15</sup> *Id.* § 119. See generally *id.* § 111(a) (describing non-provisional applications); *id.* § 111(b) (describing provisional applications); *id.* § 363(b) (describing international applications designating the United States).

<sup>16</sup> Compare 35 U.S.C. § 102(a)(1) with 35 U.S.C. § 102(b) (2000) (old 35 U.S.C. § 102(b)).

<sup>17</sup> 78 Fed. Reg. 11059, 11060-62 (Feb. 14, 2013).

<sup>18</sup> This interpretation is subject to change, however, due to future case law.

<sup>19</sup> *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 424 F.3d 1374, 1380 (Fed. Cir. 2005).

<sup>20</sup> 78 Fed. Reg. 11059, 11062 (Feb. 14, 2013).

patent application on the invention up to a year later. There are, however, at least two problems with this approach.

First, and perhaps most importantly, most foreign countries do not have any similar grace period. Instead, these countries impose an “absolute novelty” requirement under which a patent application for an invention must be filed before any public disclosure.<sup>21</sup> Thus, if an inventor decides to trigger the U.S. grace period by publicly disclosing the invention before filing a patent application, most international rights will be lost.

Second, it is unclear what legal requirements a document or activity must meet to qualify as a “disclosure” that would trigger the grace period. Current guidelines published by the United States Patent and Trademark Office suggest that publication, public use, and sales activities that would qualify as prior art under § 102(a)(1) can qualify as a disclosure that triggers the grace period under § 102(b)(1).<sup>22</sup> Under these guidelines, however, the thoroughness of a disclosure is important to prevent any subsequently-disclosed material from being used as prior art. For example, if an inventor publicly discloses elements A, B, and C of an invention to trigger the one-year grace period, and someone else (who does not obtain the material from the inventor) subsequently discloses elements A, B, C, and D during the grace period, then element D can be used as prior art under 35 U.S.C. 102(a)(1).<sup>23</sup> This approach can be problematic where public use or sales activities trigger the grace period, but fail to adequately publicly disclose the elements of the invention. That is, in the example above, if public use or sales activities were deemed to publicly disclose only element A, then elements B, C, and D of the subsequent disclosure could be used as prior art. Furthermore, the guidelines published by the USPTO are subject to change due to future case law.

### **C. § 102(a)(2): Prior Art (Patents and Applications)**

In addition to the prior art defined in § 102(a)(1), prior art based on the filing date of another patent application is defined in § 102(a)(2). The provisions of this subsection state that a claimed invention cannot be patented if it “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.” In other words, issued patents and published patent applications can be used as prior art as of their effective filing date<sup>24</sup> against subsequently-filed patent applications.<sup>25</sup>

Although foreign patents and applications are not included in § 102(a)(2), a U.S. patent application that claims priority to an earlier-filed patent application in another country can be prior art against another application as of its earliest worldwide priority date. Specifically, §102(d)(2) provides that a U.S. patent or application shall be considered to have been effectively filed, “if the patent or application for patent is entitled to claim a right of priority under section 119, 365(a), or 365(b), or to claim the benefit of an earlier filing date under section 120, 121, or 365(c), based upon 1 or more prior filed applications for patent, as of the filing date of the earliest such application that describes the subject matter.”<sup>26</sup> Therefore, a U.S. patent or patent application that claims priority to a foreign application becomes prior art against other applications as of its foreign filing date.<sup>27</sup>

To qualify as prior art, these earlier-filed patent applications must also “name[] another inventor.” That is, if a person is listed as an inventor on an earlier-filed U.S. or PCT patent application, but not on the application in question, the earlier-filed application qualifies as prior art. For companies and other entities that frequently file patent applications in a particular technological field, this provision would potentially cause difficulties where different patent applications name different inventors, allowing their own patent applications to be cited as prior art. Again, however, there are exceptions that provide some relief.

### **D. § 102(b)(2): Exceptions to § 102(a)(2)**

Under 35 U.S.C. § 102(b)(2), a disclosure in a patent or patent application will not qualify as prior art under § 102(a)(2) if:

<sup>21</sup> Current notable exceptions are the United States, Canada, Australia, and Japan.

<sup>22</sup> 78 Fed. Reg. 11059 (Feb. 14, 2013).

<sup>23</sup> *Id.*

<sup>24</sup> For purposes of using a patent or application as prior art, the earliest effective filing date is the earliest date in which the relevant disclosure was provided. Thus, where a patent application may claim priority to several earlier-filed patent applications, its effective filing date would be the filing date of the earliest-filed patent application with the relevant disclosure.

<sup>25</sup> 35 U.S.C. § 102(a)(2) is roughly comparable to old 35 U.S.C. § 102(e).

<sup>26</sup> PCT applications that designate the U.S. are treated for all purposes as having been filed in the U.S. as of their PCT filing date. 35 U.S.C. § 363.

<sup>27</sup> In contrast, under old §102(e), such an application became prior art only as of its earliest U.S. or PCT filing date.

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

(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.

Subsections (A) and (B) provide similar exceptions to those under § 102(b)(1), in the sense that they provide protections to an inventor who discloses an invention before filing a patent application for that invention. For example, patent application X will not qualify as prior art under § 102(a)(2) against subsequently-filed patent application Y if the relevant disclosure in patent application X was obtained from an inventor of patent application Y. Patent application X will also be disqualified as prior art if the subject matter of patent application Y was publicly disclosed by an inventor of patent application Y before patent application X was filed. This additionally applies to public disclosures made by a non-inventor who obtained the subject matter from an inventor of patent application Y.<sup>28</sup>

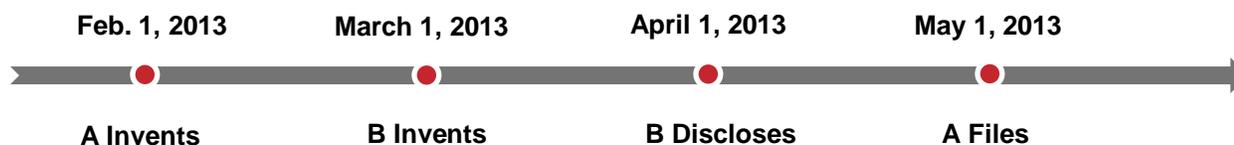
Subsection (C) provides a common-ownership exception for patents and patent applications. Under this subsection, a patent or patent application owned by an entity does not qualify as prior art under § 102(a)(2) against a subsequently-filed patent application owned by, or subject to an obligation of assignment to, the same entity. Thus, a company can help prevent its own patents and patent applications from being used as prior art against its subsequently-filed patent applications if inventors are obligated to assign patents or patent applications to the company by means of, for example, an employment contract. Bear in mind, however, that the common ownership or obligation to assign has to be in place as of the effective filing date of the subsequently-filed patent application; otherwise this exception to prior art under § 102(a)(2) will not apply.

Although there was a common-ownership exception in pre-AIA patent law, this exception is slightly different. Under prior patent law, common ownership could only be used to disqualify prior art used in determinations of obviousness. Now, under subsection (C), the exception to prior art for commonly-owned patents and patent applications applies in determination of both novelty under § 102 and obviousness under § 103.<sup>29</sup> Thus, the benefits of common ownership have been expanded under the AIA.

#### IV. Practical Examples

The following examples describe some of the more common priority and prior art scenarios and consider how these scenarios would be resolved under both the post-AIA law and pre-AIA law. These examples assume that the prior disclosure/action/invention cover the same subject matter as the subsequent disclosure/action/invention.

##### A. Example 1: Simple § 102(a)(1) – Disclosure by Another



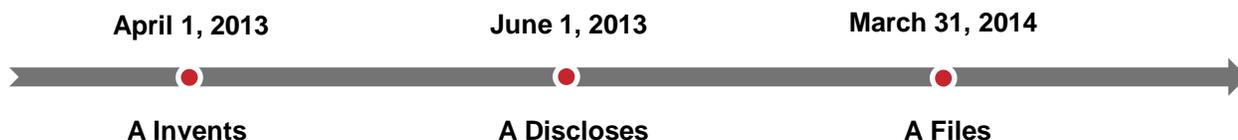
**Post-AIA:** In this scenario, B's disclosure prior to A's filing date is prior art against A's application under § 102(a)(1). A cannot get a patent unless B obtained the subject matter directly or indirectly from A and the § 102(b)(1)(A) exception applies.

**Pre-AIA:** B's disclosure is prior art under old § 102(a), but A can provide evidence of prior invention to swear behind this disclosure. A can get a patent.

<sup>28</sup> Keep in mind, however, that the public disclosure of the subject matter of patent application Y will be prior art to patent application Y under § 102(a)(1) if made more than a year before the effective filing date of patent application Y.

<sup>29</sup> Compare 35 U.S.C. § 102(b)(2)(C) with 35 U.S.C. § 103(c) (2000) (old 35 U.S.C. § 103(c)).

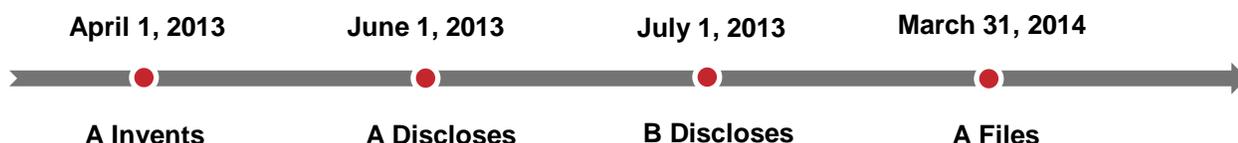
**B. Example 2: § 102(a)(1) – Disclosure by First Inventor**



**Post-AIA:** Here, A's disclosure falls under the § 102(b)(1)(A) exception as being made by A less than one year prior to A's filing date. A's disclosure is not prior art and A can get a patent.

**Pre-AIA:** A's disclosure was made within one year of the filing of A's application and is not prior art under old § 102(b). Further, it is not a disclosure by "another" and is not prior art under old § 102(a). A can get a patent.

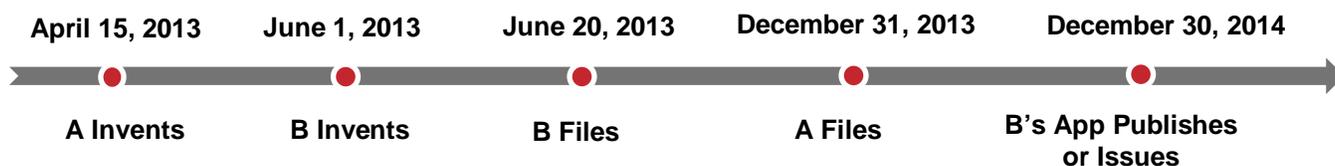
**C. Example 3: § 102(a)(1) – Disclosure by First Inventor and Another**



**Post-AIA:** In this example, A's disclosure falls within the § 102(b)(1)(A) exception and is not prior art against A's application. Further, A's disclosure prevents B's disclosure from being prior art under the § 102(b)(1)(B) exception. A can get a patent despite two prior disclosures, one of which was by another. Note that if B had disclosed before A, then the § 102(b)(1)(B) exception would not apply and B's disclosure would be prior art, preventing A from getting a patent.

**Pre-AIA:** A's disclosure falls within the one-year grace period of old § 102(b) and is not prior art against A's application (see Example 2). B's disclosure is prior art under old § 102(a), but A can provide evidence of prior invention to swear behind this disclosure. A can get a patent.

**D. Example 4: Simple § 102(a)(2) – Prior Application by Another**



**Post-AIA:** In this situation, B's publication/patent is prior art against A's application under § 102(a)(2), and A cannot get a patent even though A was first to invent. A's only hope is that one of the § 102(b)(2) exceptions apply: (A) B derived the invention from A; (B) A disclosed before B filed (see Example 5); or (C) A and B's inventions were commonly owned<sup>30</sup> prior to A's filing date.

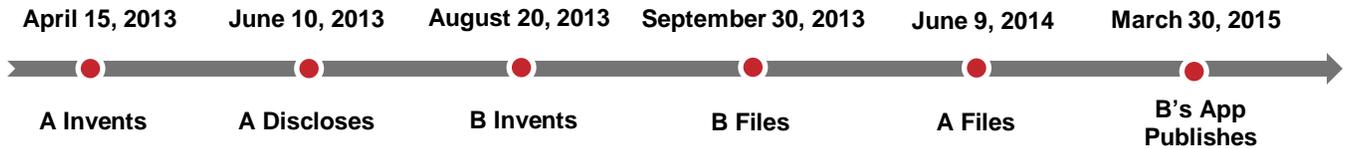
With respect to B's application, B gets the patent even though A invented first; B won the "race" to the patent office.

**Pre-AIA:** B's application/patent is prior art against A's application under old § 102(e), but A can provide evidence of prior invention to swear behind B's application and eliminate it as prior art. Both A and B can get a patent. Note that if the claimed inventions are identical, then priority of invention should be determined in an interference

<sup>30</sup> Note that, as discussed above, if the § 102(b)(2)(C) exception were to apply because the two inventions were commonly owned, B's publication would be eliminated as prior art against A's application for both anticipation and obviousness considerations, in contrast to old § 103(c), which only allowed for elimination of such prior art for obviousness considerations.

proceeding, which no longer exists for post-AIA patent applications, as the question of who was “first to invent” is no longer relevant for these applications.

**E. Example 5: § 102(a)(2) – Prior Application by Another and Disclosure by First Inventor**



**Post-AIA:** A’s disclosure is not prior art against A’s application because it was made within a year of A’s filing and the § 102(b)(1)(A) exception applies. Further, while B’s application qualifies as prior art under § 102(a)(2), A’s prior disclosure means that the § 102(b)(2)(B) exception applies, eliminating B’s application as prior art. A can get a patent.

B, however, cannot get a patent, because even though B won the race to the patent office and filed before A, A’s disclosure prior to B’s filing is prior art against B’s application under § 102(a)(1) (assuming no other exceptions apply).

**Pre-AIA:** B’s publication is prior art against A’s application under old § 102(e), but A can provide evidence of prior invention to swear behind B’s application and eliminate it as prior art. Further, A’s disclosure falls within the one-year grace period of old § 102(b) and is not prior art against A’s application.

What about B’s application? A’s prior disclosure is within one year of B’s filing and is not prior art under old § 102(b); no other prior art categories apply. B can also get a patent. Note that if the claimed inventions are identical then an interference proceeding should be used to determine who gets the patent (see Example 4).

**F. Example 6: § 102(d) – Foreign Priority**



**Post-AIA:** Under § 102(d), B’s foreign priority date is the relevant date for determining effective filing date under § 102(a)(2). B filed in a foreign jurisdiction before A, so B’s publication is prior art against A’s application under § 102(a)(2) and A cannot get a patent. Note that the foreign priority date is also the effective filing date for purposes of § 103 (obviousness); this greatly expands the scope of available prior art.

**Pre-AIA:** B’s effective filing date as prior art is B’s U.S. filing date; foreign (non-PCT) priority dates are not relevant under old § 102(e). B’s application is not prior art against A. A can get a patent.

B can also get a patent because, while B’s foreign priority application cannot be used as prior art against A’s U.S. application, B is entitled to rely on the foreign priority date to disqualify A’s application as prior art.<sup>31</sup>

<sup>31</sup> Old 35 U.S.C. § 119(a).