THE IMPACT OF PUBLIC DISCLOSURE UNDER THE AMERICA INVENTS ACT

The Leahy-Smith America Invents Act of 2011 (AIA) was signed into law on September 16, 2011. It changed the United States from a *first-to-invent* patent system to a *first-inventor-to-file* patent system. This focus on filing priority under the AIA means that the impact of public disclosure on patentability is even greater than it was under the former law.

1. When do the public disclosure provisions of the AIA take effect?

The AIA provisions regarding public disclosure apply to any US patent application filed on or after March 16, 2013. The following questions target issues that pertain to these patent applications.

2. What constitutes a public disclosure?

A public disclosure is information available to the public that describes an invention claimed in a US patent application. It can be in the form of an issued patent, a printed publication (including a published patent application), or anything else. An invention is also deemed to be publicly disclosed if it is "on sale" or "in public use."

3. How does the timing of a public disclosure affect patentability?

In general, a public disclosure that is in existence on the filing date of a US patent application can be used to show that the invention claimed in the application is not "new" and therefore does not meet the requirements for patentability. The exceptions to this general rule are discussed below.

4. When does a patent application or an issued patent constitute a public disclosure?

A US patent application (or an international application designating the United States) can serve as a public disclosure to bar issuance of another US application with a later filing date (unless an exception applies). A foreign patent application can serve as a public disclosure to bar issuance of a US application only if the foreign application's issues or is published before the US application is filed.

5. What constitutes a "printed publication" for public disclosure purposes?

In the first place, a printed publication doesn't have to be "printed." Any information in fixed media form (including electronic publications) can qualify as a printed publication, provided that it is available to the public. In order to bar patentability, a printed publication must include a description of the invention that is detailed enough to enable a person familiar with the field ("skilled in the art") to duplicate or use it.

Scholarly publications, whether available in traditional print form or only electronically, are the types of printed matter that academic researchers often associate with a public disclosure. But here are some other examples of activities that could potentially lead to a "printed publication" patent bar:

- distributing a video
- posting an article online
- submitting an abstract as a proposal for a book
- placing a single copy of a student thesis on the library shelves
- cataloging a dissertation for microfiche distribution
- including an abstract in a grant proposal
- emailing an abstract to prospective attendees of a professional conference
- giving an oral presentation attended by a reporter who writes about it in a newspaper article
- making a poster presentation
- participating in a television or radio interview
- submitting a proposal to a federal agency
- making a report to a public or private research sponsor

6. Under what circumstances is an invention deemed to be "on sale" or "in public use"?

There is some controversy as to whether a secret sale or a non-public use constitutes a public disclosure under the AIA. The US Patent and Trademark Office (USPTO) says that secret sales and private uses will not bar patentability under the new law, but until the courts weigh in on this issue, the safest course is to presume that *any* sale or use of an invention before the

filing of a patent application will constitute a public disclosure that could prevent issuance of a patent. Two final points: (a) the thing being "used" or "sold" when an invention is "on sale" or "in public use" is a product or a process embodying the invention; and (b) an invention can be "on sale" even if it has merely been offered for sale (an actual sale is not required).

7. Do inventors have a grace period after a public disclosure in which to file a patent application under the AIA?

Yes, although it is very different from the grace period under the former law. The AIA permits an inventor to "earn" a one-year grace period by publicly disclosing his invention. As long as he files a US patent application on his invention within a year, neither his original disclosure nor a subsequent disclosure made by a third party will bar issuance of a patent on the invention. However, the inventor's public disclosure does not protect him from earlier public disclosures by a third party, and he is only protected from later disclosures by a third party to the extent that they take place during the grace period and describe the *same* subject matter already disclosed by the inventor. If the third party discloses the same subject matter before the inventor discloses the subject matter, then the inventor is not protected and thus, does not earn a one year grace period for filing a patent application. Any disclosure of new subject matter by a third party during the grace period will still constitute a public disclosure that could prevent the inventor from getting a patent on his invention—even if the new subject matter consists of trivial changes or obvious variations. According to the USPTO, however, a third party's intervening disclosure will not bar patentability of the original invention if it is simply a more general description of the subject matter of the inventor's earlier disclosure.

8. What will prevent a public disclosure in one US patent application from barring the issuance of another US patent application?

An inventor will not be barred from getting a patent due to a disclosure of her invention in a third party's earlier-filed US patent application IF:

- (a) the third party obtained the information concerning the invention (directly or indirectly) from the inventor or her co-inventors and the filing date of the inventor's application is less than a year after the filing date of the third party's patent application; OR
- (b) the invention was publicly disclosed (directly or indirectly) by the inventor or her co-inventors prior to the filing date of the third party's patent application and less than a year before the filing date of the inventor's own patent application; OR
- (c) on the filing date of the inventor's patent application, the subject matter of the disclosure in the third party's patent application is owned by the same entity that owns the invention claimed in the inventor's patent application. In fact *actual* joint ownership is not even required if the invention claimed in the inventor's patent application and the subject matter of the third party's disclosure were both developed as a result of activities within the scope of a joint research agreement in effect by the filing date of the inventor's patent application. Under these circumstances, joint ownership will be assumed, and the earlier-filed application will not constitute a public disclosure to bar issuance of the later-filed application. The only additional requirement is that the parties to the joint research agreement must be named in the inventor's patent application.

9. Is it possible for a researcher to publish and patent?

Yes. Depending on the particular situation, any of the following alternatives may be an appropriate way to deal with the publish vs. patent dilemma:

- (a) The most attractive alternative (because it allows a researcher to both publish and patent) is simply to file a patent application prior to publishing any information concerning a new invention. From a commercialization point of view, this option preserves the maximum range of patent rights, but also requires the filing of a patent application on an invention at the earliest stage of technical development when the commercial potential is most unknown.
- (b) It is also possible to publish broad generalities regarding the new invention while being careful not to include enough information for anybody (even a person "skilled in the art") to duplicate or use it. An example of this in one common field is for a researcher to present data generated by a new drug compound without actually revealing the chemical structure. Unfortunately, this alternative may not always be viable if the "broad generalities" are the whole invention or if the enabling details cannot reasonably be omitted from the publication. From a commercialization perspective this option has the potential to preserve broad patent rights, but also risks the inadvertent disclosure of sufficient information to disqualify subsequent patenting in some or all countries.
- (c) Alternatively, the new invention could be published in detail prior to filing a patent application, thereby abandoning any hope of patent protection in most foreign countries, but invoking the new one-year grace period. In this case, a patent application *must* be on file within a year, and the researcher must hope that no other groups publish similar inventions during the intervening period. From a commercialization perspective, this is the least desirable option.