



## **BARS TO PATENTABILITY A GUIDE FOR THE GENERAL PRACTITIONER**

**A**lthough you may not be a patent attorney, you may be asked to protect your client's right to file a patent application on his or her invention. If that occurs, it is imperative that you know how to advise him or her about filing before it's too late.

In the United States, there are eight statutory "bars to patentability." Any one of these will forever bar an inventor from being able to file an application on an invention that may otherwise meet the criteria for patentability. If that occurs, the invention will fall into the public domain.

How might these statutory bars arise?

They certainly will come up during the prosecution of a patent application. But any one of these also may be raised in litigation by an accused infringer seeking to evade a judgment of infringement. The defendant will try to demonstrate that the patent is invalid, despite the presumption of validity accorded by its issuance by the U.S. Patent & Trademark Office.

Because these bars are the death knell for a client's rights to an invention, it is important that all lawyers be familiar with them.

### **THE "PUBLIC DISCLOSURE" BAR: 35 U.S.C. § 102(B)**

A U.S. patent application may not be filed more than one year from the date of a publication in any country disclosing the invention or public use of the invention in this country.

It does not matter whether the publication or public use is by the inventor or someone else; disclosures of the invention to any third party who is not under an obligation to keep it confidential fall within the scope of this statutory bar. A publication will trigger the rule as long as the description of the invention is sufficient to permit a person skilled in the relevant field to make and use the invention.

Any method of publication can start the one-year clock running, including written articles; brochures; e-mail transmissions; news-



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group, Web or Weblog postings; slide shows; discussions or lectures at a conference; trade show presentations or displays; and even making an obscure doctoral thesis available in the card catalog at a single library.

A single public use in the United States is sufficient to start the clock, even if only a single person is aware of the use. And the use of an invention in a public place is considered public even if the invention cannot be observed by the public. For example, in the classic case of *Egbert v. Lippmann*,<sup>1</sup> the Supreme Court found that the wearing of a corset designed for a woman by her boyfriend was a public use, because he placed no special restrictions on her use, even though the corset was not on public display.

It is also important to know that in most foreign countries, there is no corresponding one-year grace period, and any publication or public use prior to filing a patent application can eliminate patentability. For example, an inventor who publicly disclosed an invention by publishing a paper in Germany eight months ago will be barred from filing a patent application in Germany on that invention, because Germany operates under the absolute novelty requirement, and the publication of the paper destroyed the novelty of the invention. Notwithstanding that, because U.S. law allows a one-year grace period, the same inventor may properly file a patent application in the United States and be granted a patent.

In any case, to avoid all potential public disclosure bar issues, inventions should be disclosed to patent counsel for evaluation and preparation of an application well before any proposed publication or public use.

#### THE "ON-SALE" BAR: 35 U.S.C. § 102(B)

A U.S. patent application may not be filed more than one year from the date a prod-

uct or service embodying the invention was first offered for sale or sold.

The on-sale bar exists primarily to keep an inventor from exploiting the commercial value of an invention while intentionally delaying the beginning of the patent term. For example, absent the on-sale bar, an inventor who sells his or her invention for five years and then applies for a patent would effectively receive 25 years of exclusive commercial rights, whereas a patent owner is only entitled to a 20-year maximum patent term under U.S. law.

In *Pfaff v. Wells Electronics*,<sup>2</sup> the Supreme Court held that the on-sale bar's one-year clock begins to run when a product is "the subject of a commercial offer for sale" and "ready for patenting." The "ready for patenting" condition may be satisfied either "by proof of reduction to practice before the critical date; or by proof that prior to the critical date the inventor had prepared drawings or other descriptions of the invention that were sufficiently specific to enable a person skilled in the art to practice the invention."<sup>3</sup> Thus, the on-sale bar's one-year clock can begin to run even if the inventor has not actually reduced the invention to practice by producing a physical embodiment.

This is frequently the case with software and Internet-related inventions, for which the one-year clock may start to run as soon as a proposed specification is provided to a prospective purchaser or licensee of the software application, even if the software application has not begun to be developed. In this scenario, if the inventive concepts for developing the software are described in sufficient detail for a programmer to be able to develop the application, then the invention is probably "ready for patenting," which starts the clock running.

Companies often discount the on-sale bar and do not discover the gravity of their disregard for the rule until they attempt to enforce their patent rights and discover that their patent is invalid. For example, in

*Stearns et al. v. Beckman Instruments*,<sup>4</sup> two biotechnology company CEOs invented high-pressure liquid chromatography equipment and sent a prototype to induce a customer to buy the equipment.

Later, they applied for and were granted a patent. When they sued their competitor for patent infringement, they learned that their patent was invalid and worthless because of their earlier commercial activity.

It is important to note that even a single offer for sale is sufficient to start the one-year clock running. It is immaterial whether the offer for sale is made by the inventor or someone else, or whether the sale is innocent or fraudulent. It also does not matter whether the offer is actually accepted or whether the offer is made confidentially or only to a single customer, as long as there is an attempt being made to take commercial advantage of the invention.

#### THE "PATENTED IN A FOREIGN COUNTRY" BAR: 35 U.S.C. § 102(D)

A U.S. patent application may not be filed more than one year after the invention was patented in a foreign country.

This provision applies when a foreign inventor files a patent application in his or her home country and waits more than a year before filing an application for the same invention in the United States. If the foreign application is granted as a patent before the U.S. application is filed, the inventor loses the right to file a U.S. patent application—even if the foreign patent is later determined to be invalid.

This bar exists to encourage speedy fil-



ing of patent applications in the United States. It can easily be avoided by filing a U.S. patent application concurrently with the filing of the foreign patent application, or shortly thereafter.

**THE “DERIVATION” BAR:  
35 U.S.C. §102(F)**

A U.S. patent application may not be filed by an applicant who derived the subject matter sought to be patented from another person or source, rather than inventing it himself or herself.

Although this may seem evident, the consequences of noncompliance can be grave. Either intentionally naming someone as an inventor on a patent application who is not actually an inventor or intentionally failing to join as an applicant someone who is actually an inventor can later render the entire patent void and unenforceable during infringement litigation.

Upon filing a patent application, the named inventors each must sign an oath or declaration stating that they have reviewed and understood the contents of the application and believe that the named inventor(s) are the original and first inventor(s) of the subject matter that is claimed and for which a patent is sought. Thus, improperly naming inventors deliberately cannot only invalidate a patent but also can subject those who signed the oath or declaration to perjury penalties, including fine and imprisonment.

In a situation that routinely arises in patent practice, clients often ask a patent attorney to name an individual who is a supervisor, manager, company officer or director as a joint inventor on a patent application, for business or career-related reasons. If the individual was not, in fact, responsible for any of the conception or reduction to practice of the invention, then the patent attorney must decline to name the individual as an inventor on the application. Otherwise, the derivation bar would be triggered: The non-inventor individual would be considered to have derived the invention from the true inventor.

If the patent attorney knowingly allows the non-inventor to be named as a joint inventor, and a patent were to issue and be

licensed to a manufacturer, the manufacturer would later find itself unable to enforce the patent based on the fraudulent declaration of joint inventorship made by the inventor and non-inventor in the patent application.

**THE “NOVELTY” BAR:  
35 U.S.C. §102(A)**

A U.S. patent application may not be filed on an invention that was publicly known or used by others or described in a printed publication before the inventor’s date of invention.

This bar prevents an inventor who was not the first inventor from obtaining a patent. Knowledge or use is deemed accessible to the public if there has been no deliberate attempt to keep it secret—that is, only if the public could have learned the structure of the claimed device or claimed process steps by public examination. Therefore, a secret use of a product or process cannot act as a bar to novelty even if the product is sold commercially, so long as the public could not have learned of the claimed process by examining the product.

For example, an inventor who believes she is the first to invent a product might file a patent application, but during the prosecution of the application, the Examiner at the Patent Office produces a magazine article published before the inventor’s date of invention that contains a detailed description of the exact same product. Under these circumstances, the patent application will be rejected, and the inventor will be unable to overcome the rejection. On the other hand, if the inventor can produce evidence that her date of invention preceded the publication of the magazine article, she will be able to overcome the rejection.

**THE “ABANDONMENT” BAR:  
35 U.S.C. §102(C)**

A U.S. patent application may not be filed on an invention on which the inventor abandoned his or her intention to obtain patent protection.

This issue is rarely decided during prosecution of an application because the Patent Office cannot know the intent of an inventor prior to filing an application for a

patent. Instead, this issue arises frequently in infringement litigation. Abandonment may occur, for example, if an inventor publishes an article about the invention stating that it may be used freely by the public, if an inventor allows others to practice the invention without a license or restriction, or if an inventor keeps an invention secret until he or she discovers that someone else has independently invented the invention and is using it. Any of these activities will bar the inventor from being able to file for U.S. patent protection.

In particular, an inventor who decides to keep an invention a trade secret is likely to forfeit the right to a patent, because patent law requires full disclosure of the details of an invention, while trade secret law requires maintaining complete secrecy of those details. Keeping the invention secret can thus evidence the inventor's abandonment of his or her intent to obtain patent protection.

What if the inventor is keeping the invention secret but discovers that someone else is selling the invention and making great profits? The inventor then changes his or her mind and decides to seek patent protection. The patent will be barred by the evidence of the inventor's prior intent to abandon patent protection for the invention.

On the other hand, what if an inventor becomes critically ill and is hospitalized for a long period of time during the prosecution of a patent application and receives a notice from the Patent Office that the application has been abandoned for failure to respond to a communication from the Patent Office? The inventor will be able to revive the application because there was never an intent to abandon patent protection.

#### **THE "DUE DILIGENCE" BAR: 35 U.S.C. § 102(G)**

A U.S. patent application may not be filed on subject matter that an inventor invented if another inventor previously independently conceived of the invention and diligently reduced it to practice, without having abandoned, suppressed or concealed the invention.

When a patent application is filed that

describes an invention in sufficient detail to permit a person skilled in the field to practice it, the invention is considered constructively reduced to practice, even if no actual reduction to practice—such as building a prototype—has occurred. Diligence is only relevant if the first to conceive of an invention is the second to reduce it to practice. In that case, to be entitled to a patent, the first to conceive must show diligence prior to the conception of the inventor who is second to conceive and first to reduce the invention to practice.

For example, in *Dow Chemical Co. v. Astro-Valcour, Inc.*,<sup>5</sup> a prior inventor successfully challenged the validity of a patent covering a method for producing polyethylene foam. The prior inventor, who did not even realize that he had, in fact, invented anything, was not required under patent law to file a patent application. Despite his having failed to establish his own right to a patent, he undertook continuous efforts to make the benefit of his invention available to the public through his reasonable efforts toward commercialization. Thus, his two and one-half year delay in commercializing the invention was not tantamount to abandonment, concealment or suppression of the invention.

#### THE “OBVIOUSNESS” BAR: 35 U.S.C. §103

A U.S. patent application may not be filed on an invention that a person skilled in the technical field at the time it was invented would have found to be an obvious modification to one or more known devices or methods.

This bar is most often raised during the prosecution of a patent application when an examiner rejects the application based on the teachings of one or more prior art documents. Such a rejection based on obviousness often can be negated if any of the following is the case:

- The invention has met great commercial success.
- There was a long-felt need for the invention that was not met until the invention.
- Others were unsuccessful in solving the problem addressed by the invention.
- Experts in the field didn’t believe that the invention was viable.

- The invention produced unexpected results.

The issue of obviousness also may be raised in infringement litigation but can be somewhat difficult to prove either to a judge on summary judgment or to a jury.

For example, table salt (sodium chloride) is often used interchangeably with potassium chloride, which has a chemically similar structure. Substituting potassium chloride for sodium chloride in an existing road salt mixture would be considered an obvious modification by a chemist and would therefore not be patentable.

As another example, taking a known method for performing a financial transaction and merely implementing it using the Internet will almost always be considered obvious and unpatentable, unless there is some unexpected benefit of doing so.

#### EXPERIMENTAL USE EXCEPTIONS

Although there are very narrow “experimental use” exceptions to some of the statutory bars, inventors or companies engaged in experimental activities need to take measures to make sure that such activities will be construed not as sales, offers for sale or public use, but rather as experiments to determine whether the invention will function for the intended purpose in its intended environment.

In *Allen Engineering Corp. v. Bartell Indus. Inc.*,<sup>6</sup> the Court of Appeals for the Federal Circuit provided the following exhaustive list of factors that courts use to determine whether a use or sale is experimental in nature: (1) the necessity for public testing, (2) the amount of control over the experiment retained by the inventor, (3) the nature of the invention, (4) the length of the test period, (5) whether payment was made, (6) whether there was a secrecy obligation, (7) whether records of the experiment were kept, (8) who conducted the experiment, (9) the degree of commercial exploitation during testing, (10) whether the invention reasonably requires evaluation under actual conditions of use, (11) whether testing was systematically performed, (12) whether the inventor continually monitored the invention during testing, and (13) the nature of contacts made with potential customers.

#### PRACTICAL STEPS TO AVOID THE BARS

The safest way to protect against these statutory bars is to consult a patent attorney as early as possible to determine whether filing a patent application on the invention is appropriate; before the invention is described in a printed publication or demonstrated, discussed, or offered for sale to third parties; and before any activity takes place that could be considered abandonment of the intent to file a patent application.

It should be kept in mind that a party accused of infringing a patent will inevitably try to escape infringement by arguing that the patent is invalid. An accused infringer will attempt to recast even the most innocuous commercial activity as an offer for sale, and early commercial activity coupled with late patent filing can weaken or destroy a patentee’s case for infringement, or at least complicate litigation.

It is also vital for communication to take place between individuals working on sales and marketing, research and development, and patenting, so that each of these activities is not performed in a vacuum. In-house or outside counsel needs to be kept current with a company’s intent to discuss an invention orally or in writing with any outside parties, or to offer the invention for sale. Likewise, individuals involved in research and development, as well as in sales and marketing, also need to be kept aware of any inventions their company intends to patent and need to understand how to avoid triggering the statutory bars. [AZ](#) [AT](#)

#### endnotes

1. 104 U.S. 333 (1881).
2. 525 U.S. 55 (1998).
3. *Id.* at 69.
4. 222 U.S.P.Q. 457 (Fed. Cir. 1984).
5. 267 F.3d 1334 (Fed. Cir. 2001).
6. 299 F.3d 1336, 1353 (Fed. Cir. 2002).