

From Your Office to the Patent Office: Tips on Gathering and Identifying Patentable Employee Inventions

Obtaining patent protection for employee-generated inventions can be tricky for organizations large and small. Employee-inventors must first be able to recognize that they have a potentially patentable idea, and then they must disclose that idea to the organization. That disclosure typically takes place using an invention disclosure form. Once the invention has been disclosed to the organization by the inventor, the organization must then determine whether the idea should be the subject of a patent application. To complicate matters, it may be desirable for this process to proceed quickly, as recent changes to U.S. patent law may eliminate many of protections previously provided to patent applicants when there were delays in the filing of the patent application. This article discusses these issues and offers suggestions on how to turn ideas into patents.

Encouraging Employee-Inventors to Disclose Their Inventions

Employee-inventors may be resistant to requests to provide invention disclosures, either because they are unfamiliar with or uninterested in the patent process, or because they are simply too busy. In some cases, it may be the responsibility of in-house patent counsel or the technology transfer office to encourage invention disclosure by inventors.

To this end, some organizations provide inventors with incentives, such as monetary incentives.¹ Incentives may be limited to those disclosures that do eventually become patents, or may be for any disclosure that the organization ultimately decides to pursue.

As another means of encouraging invention disclosures, some organizations aim to simplify the invention disclosure process. In some cases, this involves establishing an online (or otherwise readily accessible) invention disclosure submission process. The online process may provide inventors with, for example, an invention disclosure form along with frequently asked questions and contact information for in-house counsel or tech transfer personnel.²

In other cases, organizations may host periodic “invention harvests” as another means to simplify the invention disclosure process. While invention harvests may take a number of forms, the general idea is that inventors meet to brainstorm and discuss inventions, while in-house counsel, tech transfer personnel, and/or outside counsel (also at the meeting) take note of potential inventions mentioned during the discussion. Invention harvests offer a number of potential benefits. First, the invention harvest may eliminate the need for inventors to take the initiative in providing invention disclosures. During the harvest, the counsel or tech transfer personnel may collect from the inventor all of the relevant information, and may prepare the invention disclosure themselves. Second, some of the inventions that come up in the discussion at an invention harvest may be inventions that the inventors would not otherwise think to provide in an invention disclosure because the invention may be small or specific, or may not seem to the inventor to be patentable. Or, discussion among inventors may transform unpatentable inventions into patentable inventions. Often, the experience of the counsel or tech transfer personnel may allow for recognition and/or development of potentially

patentable inventions, even where the inventors do not yet recognize them. Third, when a potentially patentable invention is mentioned in an invention harvest, counsel or tech transfer personnel may have the opportunity to immediately question the inventor for additional information, which may expedite a determination of whether the organization is interested in further pursuing the invention through the patent application process.

The Invention Disclosure Form

One simple way to receive invention disclosures from inventors is through an invention disclosure form. These forms may include any number of questions, and each organization may wish to receive different types of information from their inventors.³ Here are some possible questions you may wish to include.

What problem is being addressed?

This question, while simple, allows counsel and tech transfer personnel to easily and quickly understand the invention and evaluate its potential for patenting and licensing. It may also be useful to ask the inventors for background information regarding the problem. For example, how has this problem been addressed in the past? Have other solutions to the problem been proposed, either by others or by the inventors themselves?

What is the invention?

In particular, how does the invention address the main problem? How does the invention differ from previously proposed solutions? What are the comparative advantages of the invention? Which features, in particular, enable these comparative advantages? A written summary of the invention is certainly useful, and equally (if not more) useful in many cases are figures. What form may the invention take (e.g., method, system, device, apparatus, material composition, etc.)? Keep in mind that many inventions may take more than one form. For inventions that take the form of a device, system, or apparatus, block diagrams may provide a clear and simple explanation. For inventions that take the form of a method, flowcharts can be helpful. These figures, along with the written summary, may allow counsel and tech transfer personnel to easily and quickly understand the invention, and further may greatly aid in drafting a patent application directed to the invention. Some companies also find it useful to ask the inventor to categorize the invention. This may aid in, for example, evaluating the invention or selecting outside counsel to draft a patent application directed to the invention.

What are some possible alternatives, variations, or modifications of the invention?

Put another way, how might a competitor design around a patent directed to this invention? These alternatives, variations, and modifications may be included in a patent application directed to the invention.

Has the invention been disclosed?

It may be useful to spell out for the inventor the different types of disclosure that are possible, including, for example, publication in a journal, presentation at a conference, sale or offer for sale of the invention or a product that includes the invention, and grant applications. It is important to find out when and where any such disclosure occurred, and if confidentiality or nondisclosure agreements were used. It may also be helpful to ask the inventor if any future disclosure is planned, such as an upcoming product launch or a planned submission to a journal.

What are some references or publications related to the invention?

Often, inventors are very familiar with the literature in their own disciplines and, as a result, may be able to quickly and easily identify publications and other patents that are closely related to the invention. These publications and patents often prove useful in evaluating whether the invention is patentable. It may also be helpful to ask the inventor for example search terms and/or sources that may be useful in searching for other publications and patents related to the invention.

In what stage is the invention?

Is the invention just an idea? A working prototype? Has the inventor experimented with the invention? Is there proof-of-concept data? In evaluating whether to prepare a patent application to the invention, it may be valuable to know how much more time and/or money is required to develop the product. Has the inventor already secured the funds for developing the product? How long until the invention could be commercialized?

Who are potential licensees of this invention?

Again, because inventors are often very familiar with their own fields, they may be able to quickly and easily identify parties that are doing work related to the invention. These parties (among others) may be potential licensees of a patent on the invention.

Who provided funding for the invention?

Parties that funded any part of the invention may be entitled to partial ownership of the invention. This should be investigated prior to pursuing a patent on the invention. In particular, counsel and tech transfer personnel should carefully consider the provisions of the Bayh-Dole Act⁴ for any federally funded inventions.

Additionally, it is useful to ask inventors to provide their full legal name, their home address, and their citizenship information on the invention disclosure form. This often saves counsel and tech transfer personnel the trouble of tracking this information down during any subsequent patent application process.

Turning an Invention Disclosure into a Patent

Most organizations do not have the resources to pursue patents for every invention disclosed by inventors. Rather, most organizations take the time to evaluate each invention disclosure to consider its potential value both as intellectual property and as a source of revenue.

Accordingly, organizations should consider establishing a set of criteria to be used to determine whether a patent should be pursued for an invention, as well as to assess the priority of obtaining protection for an invention in comparison with others. Example criteria include the novelty of the invention, the detectability of the invention, the value of the invention to the organization (as an intellectual property asset and/or as a revenue generator), the value of the invention to competitors of the organization, the ease of implementation of the invention, the ease of designing around the invention, the longevity of the invention (*e.g.*, as compared to patent life), any regulatory issues related to the invention, the breadth of claims for the invention (which may relate to prosecution time of an application), the royalty and licensing potential of the invention, the market size for the invention, the market need for the invention, competition for the invention, and the business impact of the invention.

Organizations should also consider conducting a prior art search prior to filing a patent application. The process of preparing a patent application can be a costly endeavor, and the fees charged by the Patent Office for filing an application are increasing. Though a prior art search may add additional cost to the preparation of a patent application, it can also alert counsel and tech transfer personnel to prior art that would make obtaining patent protection for the invention difficult or impossible. Armed with this knowledge, the organization may decide to forego the costly process of preparing a patent application after having spent only a fraction of that cost on a prior art search. Further, a prior art search may aid counsel or tech transfer personnel in determining what aspects of the invention are truly novel once the decision to file an application has been made. This, in turn, may inform how best to shape the claims and disclosure of a patent application directed to the invention.

Prior art searching may be performed by the organization itself, or by outside counsel or outside prior art searching companies. Outside counsel may have relationships with particular prior art searching companies, and may be able to request searches for organizations at a reduced cost.

Impact of the America Invents Act on Invention Disclosure

With the recent passage of the Leahy-Smith America Invents Act (AIA),⁵ which will change the U.S. patent system from a first-to-invent system to a first-to-file system, inventors and organizations must be diligent in turning ideas and invention disclosures into patent applications. While the specific provisions of the AIA discussed below do not become effective until March 16, 2013,⁶ organizations should plan ahead and be ready for these changes.

In light of the changes to U.S. patent law that will be coming due to the passage of the AIA, organizations must ensure, prior to the disclosure of any proprietary information, that the information

has been evaluated for patentability, and if that information is deemed to be patent-worthy, that the information is the subject of a patent application. This is because the AIA will eliminate a patent applicant's ability to "swear behind" prior art.⁷ After March 16, 2013, third parties could potentially use that proprietary information as the basis for their own patent application, and if a third party beats the organization in the race to file a patent application concerning that proprietary information, then the organization risks losing the right to a patent. While the AIA establishes a procedure to allow organizations to challenge the patents of third parties who used the organization's own information as the basis of a patent application,⁸ this procedure will likely be costly and may have other challenges.

Moreover, the AIA increases the geographic scope of prior art, which should encourage organizations to file patent applications quickly. Specifically, the AIA removes territorial restrictions for certain classes of prior art, such that if the invention was in any way available to the public, anywhere in the world, prior to the filing date of the application, then that public knowledge or use is available as prior art against a patent application.⁹ For example, prior to the enactment of the relevant provisions of the AIA (*i.e.*, before March 16, 2013), information disclosed may not, in many cases, be prior art against a patent application for an invention in the United States.¹⁰ After March 16, 2013, this information may be available as prior art. This change in the law will make prior art searching more difficult, as the search may not identify information from the trade show as prior art, especially if the information was disclosed orally or was otherwise not published. Moreover, the removal of the territorial restriction increases the amount of potential prior art, making it that much more important that organizations file patent applications promptly, particularly in crowded technology areas, where a few weeks priority over other patent applications may be crucial.

Conclusion

Organizations should have a procedure in place to allow (and encourage) inventors to disclose potentially patentable ideas to the organization. Such a procedure, along with a useful invention disclosure form, will allow organizations to quickly determine whether these ideas should be the subject of a patent application and to put those patent-worthy ideas into patent applications. With the passage of the AIA, time is of the essence when turning ideas into patent applications.

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Endnotes

1. See Gideon D. Markman, *Entrepreneurship from the Ivory Tower: Do Incentive Systems Matter?*, 29 J. Tech. Transfer 353, 355 (2004) (noting in the context of invention disclosures that “pay does seem to function as an important aligning mechanism in many industries and particularly in knowledge-based domains”).
2. *E.g.*, Office of Cooperative Research, Yale University, Disclose an Invention, <http://www.yale.edu/ocr/disclose.html> (last visited Oct. 26, 2011).
3. A search on Google for “invention disclosure form” returns various examples of such forms. The best examples may be those from universities, which typically have substantial technology transfer programs.
4. See 35 U.S.C. §§ 201-212 (2006); 37 C.F.R. § 401 (2010).
5. Pub. L. No. 112–29, 125 Stat. 284.
6. *Id.* § 3.
7. *See id.*
8. *Id.*
9. *Id.* (stating that a person is entitled to a patent unless, *inter alia*, “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”).
10. See 35 U.S.C. 102(b) (2006) (stating that a person is entitled to a patent unless, *inter alia*, “the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale *in this country*, more than one year prior to the date of the application for patent in the United States” (emphasis added)).