Invention Disclosures and the Role of Inventors

DAVID R. MCGEE, *Executive Director, Technology & Industry Alliances, University of California, Davis, U.S.A.*

ABSTRACT

This chapter is intended to assist intellectual property professionals, in working with inventors, to develop a high-quality invention disclosure and, eventually, to prosecute a patent application. Major topics include the importance of data records, utility and reduction to practice of inventions, understanding prior art (including the inventors' own art), and determination of inventorship.

1. INTRODUCTION

Invention disclosure is more than the simple completion of an institutional or corporate form to satisfy some policy requirement. It includes a complete description of something novel and nonobvious given in such a manner that anyone of ordinary skill in the particular art could reproduce the invention. The disclosure represents the first official recording of the invention and, if done properly, can establish an irrefutable date and scope of the invention. Often the disclosure document has been used to defeat challenges to dates of invention, inventorship, invention scope, and prior art. Conversely, improperly written invention disclosures many times have resulted in disastrous losses of patent rights.

This chapter explains the nuts and bolts of invention disclosures (as well as some of the nuances), beginning with the responsibility of scientists to disclose inventions even before they are made and ending with the use of disclosures to create defensible patents.

2. CONCEPTION OF AN INVENTION

The term *invention* is occasionally confused with the term *idea.* According to the U.S. Code of Federal Regulations, (37 C.F.R. §501.3(d)), an invention is defined as "*any art, machine, manufacture, design or composition of matter, or any new and useful improvement thereof, or any variety of plant, which is or may be patentable under the patent laws.*" An idea, by definition, is limited to a thought, existing only in the mind; an idea may or may not be patentable as a concept. Only inventions can be patented, not ideas.

In the legal sense, the conception of an invention occurs when someone has mentally developed an idea that is novel, nonobvious, and exists in enough enabling detail that someone of ordinary skill in the relevant area of science could practice the invention. Conception does not necessarily require actual reduction to practice of the invention, but it does require that the invention be thought through completely. The degree to which the conceptualization is incomplete should not be such that it is renders the invention inoperable.

Commonly, a complete conception occurs over a lengthy period of time and may involve

McGee DR. 2007. Invention Disclosures and the Role of Inventors. In *Intellectual Property Management in Health and Agricultural Innovation: A Handbook of Best Practices* (eds. A Krattiger, RT Mahoney, L Nelsen, et al.). MIHR: Oxford, U.K., and PIPRA: Davis, U.S.A. Available online at www.ipHandbook.org.

© 2007. DR McGee. *Sharing the Art of IP Management:* Photocopying and distribution through the Internet for noncommercial purposes is permitted and encouraged.

other contributors. The date on which such conception is deemed to be complete, that is, it satisfies all aspects required of an invention (novelty, nonobviousness, and enablement), is considered to be the date of invention. The date of invention may be, but is not required to be, either the actual date of reduction to practice of the invention or the filing date of the patent application (constructive reduction to practice).

3. INVENTORSHIP

Those individuals who contribute to an enabling concept are known as the inventors. Inventorship is, therefore, restricted to the intellectual concept. It does not extend to those persons who may reduce the invention to practice but did not contribute to the invention's conception.

Inventorship relies on specific claims ultimately approved by the patent office for the granted or issued patent. Since patent prosecution most commonly involves changes to the claims filed with the application, the inventors may change.

One of the most frequently misunderstood and contentious issues between scientists and the intellectual property (IP) professional is the confusion between inventorship and authorship. As described above, inventorship is a legal determination based on the contribution to the enabling concept embodied in at least one allowed claim. An individual who has spent extensive time and effort in the laboratory reducing an invention to practice is not an inventor in any sense unless he or she has also contributed to at least one claim.

Teams of scientists conduct most research. As such, research team members are constantly discussing technical aspects of the research; over a period of time, an idea may emerge that has been jointly developed. From the idea, an invention may be described. Frequently, conflicts arise when an author is not included as an inventor on a patent application and believes that the work performed in actual reduction to practice should mean that he or she be designated as an inventor. Unintentionally including a noninventor or excluding an inventor can usually be corrected in the patent office. However, intentionally including a person as an inventor who did not contribute to a claim is patent fraud and would render the patent invalid if discovered. Intentionally excluding an inventor could likewise render a patent invalid.

It is the responsibility of potential inventors to make a good faith effort to determine who among themselves are actual inventors. Ultimately, inventorship must be examined by the patent attorney of record to ensure that the inventors included on the patent filed are, in fact, inventors.

4. PREPARING THE INVENTION DISCLOSURE

4.1 *Education of inventors before they disclose*

The IP professional should never assume that the scientists in his or her organization are aware of when, how, to whom, and why to properly make an invention disclosure. As with many other business practices, acceptance of the patenting process begins at the top of the organization. If top management does not endorse patenting, then no one else will either. An effective education program, concerning the policies, practices, and practical understanding of the patent process, is a must for staff of the organization. The program must be continuous, since new staff will not be aware of the process, and existing staff will need to review the process on a frequent basis. The best time to educate new employees is during their orientation programs. Instruction should be supplemented at regular periods during the year to all potential inventors. Only the technology transfer office (TTO) is really qualified to educate these scientists.

4.2 *Duty to disclose*

It is essential that employees be aware of and follow the employer's policy for duty to disclose an invention. Many organizations have a policy that requires all employees to disclose to the employer all inventions made during the course of employment. Depending on the specific policy, the duty to disclose may extend beyond employment to include inventions made outside of employment, such as inventions made while consulting for another company or at home.

4.3 *When the inventor calls*

For the TTO to succeed, inventors must be confident that their inventions are going to receive a thorough evaluation of their patentability and commercialization potential. Nothing will alienate an entire cadre of inventors more quickly and completely than if the TTO treats inventions superficially or capriciously. The TTO must give careful attention to every invention disclosure, regardless of its content.

4.3.1 *Understanding your institution's IP policies and your country's IP laws*

The IP official must be the expert on his or her company and institutional IP policies and practices. These policies and practices must be carefully and patiently explained to each inventor. Likewise, all laws pertinent to any aspect of IP must be understood by the TTO and communicated whenever needed to the inventor.

4.3.2 *Understanding the inventor's timing of public disclosures*

One of the most common complications accompanying an invention disclosure is a publication or a pending publication. If publication is imminent, then a provisional patent application may be the only recourse to avoiding loss of patent rights. In the United States, a grant application is not considered a publication until the Notice of Grant Award is sent. Therefore, it is essential to completely understand the nature and content of the intended publication in order to determine whether or not it will actually contain an enabling disclosure of the invention. It also is necessary to know when the invention will be disclosed. Abstracts for scientific meetings are now commonly e-mailed to participants months before the meeting date. Depending on the specific invention, an abstract may easily be an enabling disclosure, so it is important to question each inventor to determine if and when a publication and/or abstract may occur. Many times a disclosure (such as a speech) does not provide enough detail to constitute an enabling disclosure. The TTO should obtain copies of all speeches, technical presentations, pending grant applications, and so forth, and maintain these with the patent file wrapper.

4.4 *Getting the big picture*

When an invention is disclosed, the IP professional should clearly understand not only the technical details of the invention but also how the new invention may relate to other inventions as a portfolio. Additionally, the inventor may be prolific and so it is important to know if there are additional invention disclosures anticipated by the inventor and, if so, whether those should be combined with the invention disclosure at hand. This knowledge could greatly influence whether and/or when to file a patent application and what the scope of the patent application may be in light of other existing or expected invention disclosure forms. The inventor must provide the IP professional with his or her plans to continue conducting research related to the invention. This is especially important if the invention has not been reduced to practice.

If the invention disclosed is incomplete because the inventor has not completed an enabling concept, or if reduction to practice is necessary to determine enablement, then the inventor must be clearly told what deficiency is present. The invention disclosure form will be held by the IP professional with no action taken until the inventor provides a complete disclosure. Periodic follow-up with the inventor is advisable to ensure that he or she remembers to provide the information necessary to complete the invention disclosure form.

4.5 *Inventorship versus ownership*

The duty to disclose should be not be confused with the assignment of an invention. Disclosure of an invention means merely that the invention has been described in complete (that is, enabling) detail. Assignment means that ownership of, that is, legal title to, the invention has been given by the inventor to another party (for example, the employer). Employers commonly combine the duty to disclose and the assignment of inventions on a single form to be signed by the new employee upon reporting to work. But this is not always done, so the actual language must be carefully reviewed. The combination of the duty to disclose and the assignment of invention into a single, signed document is convenient in case there are

ever any questions later during a patent prosecution of the ownership of an invention.

For certain government organizations, the duty to disclose may go beyond mere policy compliance and have additional legal consequences if timely and complete disclosure is not made.

4.6 *When the invention disclosed is co-owned*

Collaborative research projects between separate entities are common. Usually these projects are described in a contract, grant, or interinstitutional agreement. These documents will usually contain one or more sections that address co-inventorship and co-ownership of IP developed during the term of the agreement. Nothing should be assumed about the ownership of IP before thorough review of the agreement has been completed. Once ownership has been determined, the other party may need to be notified upon receipt of an invention disclosure form and prior to filing a patent application. Frequently, the other party will have an opportunity to participate in some manner during the IP process.

If an invention has been made by co-inventors and at least one of the co-inventors is from a second entity, and if there is no contractual agreement between the entities, then a decision has to be made as to whether to inform the second entity of the invention disclosure form. Prior to disclosure, it would be advisable for the two institutions to sign a two-way confidentiality agreement to avoid public disclosure and subsequent loss of rights. Additionally, in first-to- file countries, the first party should file a patent application prior to notifying the second party. Subsequent agreements, such as an interinstitutional agreement, can be made to define each party's rights and determine how patent prosecution costs will be shared.

5. WHEN TO DISCLOSE AN INVENTION

It is good practice to disclose an invention as soon as it *is* an invention. Filing an invention disclosure declares the invention, the inventors, and the date of invention. Even if a patent application is never filed, a properly completed invention disclosure may be able to provide some protection against subsequent patent applications filed by other parties that could prohibit the first party from being able to practice something it invented. This precaution may be especially helpful in the United States, where first to invent takes precedence over first to file. Most importantly, without a *timely* disclosure, no decision can be made about whether or not to file a patent application to preserve IP rights. Occasionally, a delay in disclosure may be appropriate, for example, if the inventor is continuing to conduct experiments that may provide better enablement or broader utility, which would provide broader claims should a patent be sought. However, the decision to delay filing an invention disclosure should be made in consultation with appropriate IP managers.

If an inventor is unable or resistant to completing an invention disclosure form (See Box 1 at end of chapter for a sample invention disclosure form.), then an interview with an IP professional/ TTO officer of the same institution for the purpose of disclosure may be required. Completing an invention disclosure without the inventor's input is not recommended, however, since the inventor is, naturally, more familiar with the invention than anyone else. If a patent application is prepared from an invention disclosure that has been obtained from an interview, the patent application may take longer and cost more to prepare. Ultimately, each inventor must critically review and affirm that the invention has been correctly and completely described in the patent application. In the United States, each inventor must sign a declaration affirming that the invention has been correctly and completely described, in order to meet the filing requirements of the U.S. Patent Office.

In some countries, patent offices do not require filing an invention disclosure in order to file a patent application. Under certain circumstances, however, other government agencies may require that invention disclosures be filed.

5.1 *Where to submit an invention disclosure*

Invention disclosures may be submitted wherever the employer's policy dictates, for example, with a company's own IP department or outside patent counsel or with an academic institution's TTO.

In the United States, patent law provides for a disclosure document program that allows an inventor to submit an invention disclosure to the U.S. Patent and Trademark Office (PTO). The program is described in detail in the Code of Federal Regulations (37 C.F.R. §1.2.1(c)). It is especially beneficial to individual inventors who are not affiliated with an employer, because the program provides evidence of disclosure that may avoid the necessity of disclosing, to witnesses, information the inventor wishes to keep confidential. The U.S. PTO will keep the invention disclosure for two years and then discard it unless it is referred to in a pending patent application. The disclosure document program is not a substitute for filing a patent application and provides no filing date for a patent application.

5.2 *Confidentiality of an invention disclosure*

To avoid the potential undesired publication of an invention prior to filing a patent application, all invention disclosures should be submitted confidentially. When disclosure is made by an employee to a fellow employee, it should be clearly understood that the disclosure is to be kept confidential. As such, the disclosure would not be considered a publication in most cases. In very large institutions, the presumption of confidentiality may not exist. Consequently, if challenged by an outside party, such disclosure may be deemed by the patent to have not been a confidential disclosure but a publication. Even within an organization, therefore, it is always important to verify confidentiality prior to disclosure and to execute a confidentiality agreement, if needed.

5.3 *Content of an invention disclosure form*

There is no set format for an invention disclosure form; however, there are certain types of required information common to all invention disclosure forms. Examples of the forms can be easily obtained from the Internet by selecting any search engine and entering *invention disclosure* in the search box. Numerous forms from institutions all over the world are available.[1] All the forms have certain things in common: most request similar kinds of information. Box 2 at end of chapter lists items that appear commonly on the forms.

6. USE OF LABORATORY NOTEBOOKS AS INVENTION DISCLOSURES

Laboratory notebooks are frequently relied upon to ascertain the actual date of invention and to identify the inventor. Unfortunately, most lab notebooks are incomplete, illegible, and not witnessed, or witnessed erratically—if they are kept at all. However, if kept appropriately, a laboratory notebook can easily suffice as an invention disclosure. The information must *at least* include a detailed description of the invention and signed and dated pages by the inventor and appropriate witness(es). The actual discovery (that is, the invention) must be clearly explained.

IP professionals should educate scientists about the need for complete disclosure if the notebook is to be useful at all. The scientists should also be trained to avoid writing off-hand remarks in the notebook (for example, "this was an obvious experimental approach" or "I used an obvious extension of Dr. X to conduct this research" or "there is a paper that is prior art to my research"). Such notebook disclosures would be discoverable during litigation and could result in loss of patent rights. As always, scientists should be counseled to completely disclose the invention and to provide only absolutely truthful disclosure.

7. ASSIGNMENT FORM

An assignment is the transference of legal title to an invention. Assignment of all inventions may be made in advance of any discovery by executing a general assignment agreement. During patent filing, assignment of an invention may be required by the patent office. The employer should obtain a second assignment of the specific invention being filed as a patent application because it provides the patent office with a simple, clear assignment record. However, if an inventor cannot be reached or is unwilling to provide a signed assignment, then the original general assignment agreement can serve as evidence of assignment of that invention.

Under U.S. patent law, all assignments for patent applications and issued patents must be recorded. This requirement may vary in other countries.

7.1 *What to do in the absence of a previous assignment when there is a duty to disclose*

Occasionally during the preparation of a patent application, the IP professional discovers that there is no record of assignment. A signed acknowledgement of an employee's duty to assign may also be lacking. These are serious issues, because ownership of a patent is joint and severable; any owner can act independently of a co-owner. In other words, co-owners can separately practice an invention or license it without a co-owner's permission. Therefore, obtaining clear assignment of an invention is extremely important.

7.2 *Obtaining signatures for duty to assign and assignment documents*

As soon as it is discovered that an inventor has not fulfilled the duty to assign or has not executed an assignment document, the TTO officer should promptly review the organization's policies to see if they are clear. In addition, he or she should look for other records that may include the employee's signed acknowledgment of compliance with corporate or institutional policies. For example, employee policy handbooks frequently contain sections relating to IP. It is common practice for human resources departments to obtain from employees written acknowledgement that they have read, understand, and will comply with all policies. This written acknowledgement may be useful if an inventor does not wish to provide a written assignment for an invention.

Next, the IP professional should contact the inventor, in person if possible, and explain why an assignment is necessary. If a duty-to-disclose agreement has not been signed, then the IP professional should explain to the employer why signing a duty-to-disclose agreement is important. If the institution has a policy that provides inventors with compensation, such as royalties, then the IP professional should go over those policies as well. He or she should have the agreements ready to be signed in duplicate and provide the inventor with a copy. (The original should be kept on file.) Explain that additional assignments for any future inventions will be needed and why.

It is advisable not to ask anyone to sign an agreement upon which the signature date is different than the actual date of signing—it may undercut the validity of the document. The agreement can, however, specify an effective date in the text that predates the signature, providing that no intervening and conflicting agreements have been executed.

8. DILIGENCE WHEN FILING A PATENT AFTER RECEIVING THE INVENTION DISCLOSURE FORM

Because the U.S. PTO has a first-to-invent rule, U.S. patent practice includes an obligation of diligence to proceed with the filing of a patent application once an invention is completed. A filing delay can, under certain circumstances, result in a loss of patent rights. This most commonly occurs when a second, independent party invents and files a patent application after the first party's date of invention, but before the first party's filing date. If a lack of diligence by the first party can be shown, the second party may prevail and win the patent filing. Obviously, diligence in filing is rendered a moot issue in first-to-file countries.

9. UPDATING A SUBMITTED INVENTION DISCLOSURE FORM AND COMBINING DISCLOSURE FORMS

Frequently, when an invention disclosure form is submitted, it represents ongoing research. As such, it may not meet the standards of patentability or commercialization potential to warrant a patent filing. Regardless, an IP professional should receive the invention disclosure form and assess whether or not to file a patent application. Alternatively, he or she could hold the invention disclosure form in anticipation of receiving new data or matter from the inventor. The inventor may then file a subsequent invention disclosure form as an addendum to the first form. Invention disclosure forms on related matter, if combined, may greatly strengthen a patent application with broader claims.

If the second invention disclosure form contains the best method of practicing the invention

or new matter, then the date of invention may be that of the second invention disclosure form and not the first.

10. PATENT PREPARATION FROM THE INVENTION DISCLOSURE FORM

A properly completed invention disclosure form will greatly enhance the ability and speed with which the patent attorney is able prepare the patent draft. Expediting this process can dramatically lower attorney fees. To aid in the process, the attorney should receive a complete copy of the invention disclosure form, copies of all references, clear instructions about the most important aspects of the invention that need to be claimed in the patent application, and an explanation of why these aspects are important. The patent attorney will be able to craft a patent application properly only if the client clearly describes its strategic objectives within the context of the invention.

Most inventors are unfamiliar with the patent prosecution process, and so the IP professional should clearly describe the process to the inventor and explain how he or she will be expected to assist in it. The inventor should be introduced to the patent attorney, and the employer should take care to ensure that a good, productive working relationship is established between the inventor and the patent attorney. The inventor is the expert and will need to provide the patent attorney with substantial assistance in drafting the invention background, the technical description of the invention, and access to any known references. After filing, the inventor will likely assist the patent attorney in providing technical rebuttal for issues raised by the patent office. Depending on the particular patent application, the inventor's involvement can occasionally require a substantial amount of time.

Patent counsel will prepare and file the patent application based on the invention disclosure form. It is the responsibility of the patent counsel to prepare a complete and enabling disclosure of the invention. Most often the patent attorney will discuss the invention at length with the inventor, in order to ensure that all its features are understood. During these discussions, the patent attorney will develop the broadest claims possible without becoming an inventor.

11. MAINTAINING INVENTION DISCLOSURE FORMS

Each TTO should establish a database of invention disclosures and a secure-storage facility where original copies of invention disclosure forms are filed. A fireproof file cabinet is a good example of such a facility. Invention disclosure forms should be retained for the life of any related patent. Duplicate copies should be stored off-site. An outside patent firm will frequently provide this service. The disclosure document program at the U.S. PTO will maintain an invention disclosure form only for two years, unless the invention disclosure form is referenced in a pending patent application.

12. INVENTOR'S CERTIFICATE

An inventor's certificate may be filed in lieu of a patent application. The certificate will contain a detailed description of the invention and most of the components of a patent application. An inventor's certificate is, therefore, similar to an invention disclosure form. However, unlike an invention disclosure form, the inventor's certificate is part of a legal process (established in accordance with each country's respective patent laws and procedures) to publicly recognize the inventor(s) as an inventor for a defined invention as of a specified date.

An inventor's certificate *is not* a patent and *does not provide any of the IP protection rights provided by patenting.* Instead, many countries commonly use certificates to provide a monetary reward for an invention for which no patent is intended.

13. MARKETING INTELLECTUAL PROPERTY THROUGH AN INVENTION DISCLOSURE

It is common practice among academic institutions to market IP using the information contained in invention disclosure forms. Because

the invention disclosure form contains enabling detail of an invention, premature disclosure of such information prior to filing a patent application could destroy patent rights. Care must be taken to provide only general, nonconfidential information that does not include any enabling information. If a patent application has been filed but not yet published, then the filing date or patent application number should not be disclosed. Unauthorized parties can use these numbers to obtain confidential information about a pending application. If the patent application has been filed, then including information contained in the pending application is acceptable. The disclosed information in marketing abstracts made available for previously unpublished patent applications should be updated after the application is published. It is inadvisable to include inventors' names in marketing abstracts as points of contact; instead, the name of the licensing professional should be used.

Many institutions provide nonconfidential abstracts of IP on Web sites, which usually organize the abstracts and contact information into databases by technology area. These databases can be efficiently marketed by technology area through mass e-mailing or mailings to potential licensees. ■

DAVID R MCGEE, *Executive Director, Technology and Industry Alliances, University of California, Davis, Office of Research, Technology Industry Alliances, 1850 Research Park Drive, Davis, CA, 95616, U.S.A. drmcgee@ucdavis.edu*

1 For example: http://research.ucdavis.edu/homecfm?id=OVC,2,1025.

Box 1: Sample invention disclosure form

[Insert Institution or Company Name Here]

CONFIDENTIAL

1. **TITLE OF INVENTION:** _____

2. **OVERVIEW OR PURPOSE OF INVENTION:** _____

3. **BRIEF DESCRIPTION OF INVENTION:**
   Provide a brief abstract of the invention including novel embodiments of the invention.

4. **DETAILED DESCRIPTION OF INVENTION:**
   Provide in plain language a numbered list of what attribute(s) you, the inventor, believe is/are useful about the invention.

   Provide a complete, enabling description of the invention. Include all descriptions, steps, processes, and other data and information necessary, so that someone of ordinary skill in the art could reproduce and practice this invention. If the invention is a composition of matter, provide a complete formulary and any other information necessary to completely and accurately describe the composition. If the invention requires software that has been developed as part of the invention, provide a detailed program flow chart and copies of the software. Provide detailed drawings and a description for any apparatus.
   Attach additional sheets if necessary.

5. **BACKGROUND (Optional):**
   If known, describe the state of the art as set forth in patents or journal references (identify by patent number or journal citation, if possible) and indicate how the invention overcomes any disadvantages to or problems in this art. *Attach additional sheets if necessary. Also attach complete copies of the references.*
   If any inventor knows of any art relevant to the invention, please provide such information through description below with appropriate literature references. All cited references should be attached to the invention disclosure form.

(Continued on Next Page)

Box 1 (continued)

6. **CONCEPTION:**
Provide the date upon which a complete, enabling concept was known by the inventor(s).

Invention conceived on: _____

First written record: _____

7. **FIRST DISCLOSURE TO OTHERS:**
Provide the complete names and anyone to whom you have disclosed your invention in enabling detail and the dates on which you made the disclosures.

Date: _____ Name: _____

Date: _____ Name: _____

Date: _____ Name: _____

Indicate how the disclosure was made (for example, orally or through a presentation, report, or publication). Provide copies of any documents or other media you used to make the disclosure.

_____

_____

_____

_____

8. **FIRST REDUCTION TO PRACTICE:**
Provide the date of first preparation or isolation of compound molecule or microorganism; date of first use of process, or date of construction of apparatus.

Date: _____

9. **FIRST SALE OR PUBLIC USE OF INVENTION:**
Describe and provide the date of any sale or public use made, or planned to be made, of your invention in the United States or in any foreign countries. Provide details of any sale, use or disclosure. The description should tell whether or not the use was for testing purposes, and if there was an effort or intention to maintain secrecy around the invention after the use commenced.

_____

_____

_____

_____

10. **PROGRAM OR CONTRACT:**
Was the invention made during the course of your work on a specific program, grant(s) or contract?

Yes _____ No _____

If no, provide an explanation of how and where the invention was made.
If yes, provide below the name and applicable number of the funding agency.

Fund source Grant or contract number

_____

_____

(Continued on Next Page)

Box 1 (continued)

11. CONTACT INFORMATION
Provide the specified information about the inventor(s).

Signature of inventor: _____ Date: _____

Printed inventor name: _____

Affiliation: _____

Mailing address: _____

Citzenship: _____

E-mail: _____

Telephone: _____

Signature of inventor: _____ Date: _____

Printed inventor name: _____

Affiliation: _____

Mailing address: _____

Citzenship: _____

E-mail: _____

Telephone: _____

12. WITNESSES:
The invention was described to me by the above inventor(s), the description was examined and clearly understood.

Signature of witness: _____ Date: _____

Printed name: _____

Affiliation: _____

Signature of witness: _____ Date: _____

Printed name: _____

Affiliation: _____

Box 2: Information requested typically in an invention disclosure form

Inventor
This should include the complete name of the inventor and his or her employer affiliation and complete mailing address.

Invention
An invention should include a title of the invention, a short abstract, and a detailed description of the invention. The advantages of the invention should be clearly described. The inventor(s) should include as many features, embodiments, and uses of the invention as possible.

Date of invention
This is the date the invention was conceived in enabling detail. U.S. patent law (35 USC §104) provides for the establishment of a filing date when an invention is made abroad, as long as certain provisions are met: 1) the inventor must be domiciled in the United States or a North American Free Trade Agreement [NAFTA] or World Trade Organization [WTO] country; 2) the invention has been conceived in either the United States or a NAFTA or WTO country; and 3) the inventor must be serving in a NAFTA or WTO country on behalf of one of those countries. Such a provision may or may not be available in countries other than the United States. The provision may have no significance at all for first-to-file countries.

Date of actual reduction to practice, if applicable (may be the date of invention)
Actual reduction to practice is not required but is helpful when preparing the patent application.

Applicable research funding sources, if any
It is very important to know whether the invention has been funded by an entity, other than the inventor's employer, that may have ownership/licensing rights.

Date of public disclosure of the invention
This may be critically important if the date creates a statutory bar for patenting. If the date is in the future, then it provides a timeframe within which a decision of whether or not to file a patent application has to be made. Copies of any publications (for example, manuscripts, handouts, posters, electronic presentations, and slides) should accompany the invention disclosure form. In addition, any relevant supportive scientific references should be copied in full and attached to the invention disclosure form.

References
The inventor should include complete references and photocopies of any other related science he or she is aware of that could potentially be cited by the patent examiner as novelty-destroying or as rendering the invention obvious. There is no duty for the inventor or the attorney of record to conduct a literature search to determine whether there is any prior art to the present invention. But if the inventor or the assigned institution is made aware of any such art, then it must be disclosed to the patent office. There is no duty to provide the patent office with an opinion of the relatedness of any reference cited to the patent office. The examiner is responsible for making such a determination.

The inventors should be instructed not to provide written admission, directly or indirectly, that any reference is prior art. In some countries such a statement is viewed as an irrevocable admission that the reference is true prior art that renders the present invention as non-novel and/or obvious.

(Continued on Next Page)

Box 2 (continued)

List of potential competitors/licensees
Since inventors are knowledgeable in the area of science related to the invention, they are usually also knowledgeable about who is working in that area. This is valuable information, since it provides direction in finding potential competitors, potential licensees, and potential areas of prior art that can be reviewed before filing a patent application to help determine patentability and claim drafting. Also, one can build a better patent portfolio by reviewing patents and file wrappers filed by another institution or company.

Witnesses
Usually, at least two witnesses are required on an invention disclosure form. A witness should be scientifically competent to understand the details of the invention and not directly affiliated with the research being disclosed (for example, an inventor on the invention disclosure form or a principle investigator of the research).

Signatures of all inventors
It is critical that at least one of the inventors has signed the invention disclosure form, otherwise, the form cannot be considered to have been perfected. The TTO at the institution should try to obtain original signatures from each of the inventors as soon as possible.

Receipt of electronically filed invention disclosure forms
Faxed signatures are generally accepted worldwide as sufficient evidence of an executed document. Electronic signatures do not yet have such wide acceptance. Consequently, it is recommended that invention disclosure forms not be sent electronically without the subsequent conveyance of an original, signed copy.