

Intellectual Property Patent & Licensing Guide

for Construction Safety & Health
Researchers and Inventors



Intellectual Property Patent & Licensing Guide*

for Construction Safety & Health
Researchers and Inventors

CPWR - The Center for Construction Research and Training

8484 Georgia Avenue • Suite 1000
Silver Spring, MD 20910
Phone 301.578.8500 • Fax 301.578.8572
www.cpwr.com

**With special thanks to John F. Rabena, Esq. of Sughrue Mion, PLLC,
for his assistance and guidance in putting this Guide together.*

TABLE OF CONTENTS

I.	Introduction.....	1
II.	Key Steps and Questions to Consider.....	2
III.	What is Intellectual Property?.....	3
IV.	The Implications of the Leahy-Smith America Invents Act, also called the Patent Reform Act of 2011, on Technology Transfer.....	5
V.	How Do I Determine Whether to Pursue Intellectual Property Protection?.....	6
VI.	Ownership: Who Will Own Any Intellectual Property Developed Under My Agreement?.....	9
VII.	Inventorship: Who Should be Named as Inventors or Co-inventors on Any Patent Application?.....	12
VIII.	Licensing My Intellectual Property to Others via Licensing Agreements.....	15
IX.	Ensuring the Integrity of the Safety Intervention When Entering Into a Licensing Agreement with a Manufacturer.....	16
X.	Alternatives to Patenting and Licensing.....	17
APPENDIX A:	Links to Examples of University Intellectual Property and Technology Transfer Policies.....	19
APPENDIX B:	Sample Invention Disclosure Form.....	20
APPENDIX C:	Sample Non-Disclosure Agreement.....	25
APPENDIX D:	Applicable Statutes and Regulations.....	27

I

Introduction

The purpose of this Guide is to help researchers understand the key steps and questions they should consider, and the implications of protecting, or not protecting, any intellectual property (IP) that they develop while conducting research and developing products and materials to advance safety and health in the construction industry. This Guide was developed with safety and health researchers in mind, but it is also a useful resource for inventors and developers of equipment, tools, and resources designed to make construction job sites safer and healthier for workers.

Having partnered with NIOSH since the inception of the construction safety and health research program in 1990, CPWR has deliberately moved its National Construction Center from surveillance and needs determination to intervention evaluation, and then towards dissemination of evidenced-based best practices – research to practice (r2p). The acceleration of r2p activities included a CPWR-hosted Technology Transfer Symposium in May 2012, bringing researchers together with representatives of government, manufacturing, contractor associations, labor, and the insurance industry to discuss barriers and strategic approaches to diffuse health and safety technologies and best practices across the construction industry.

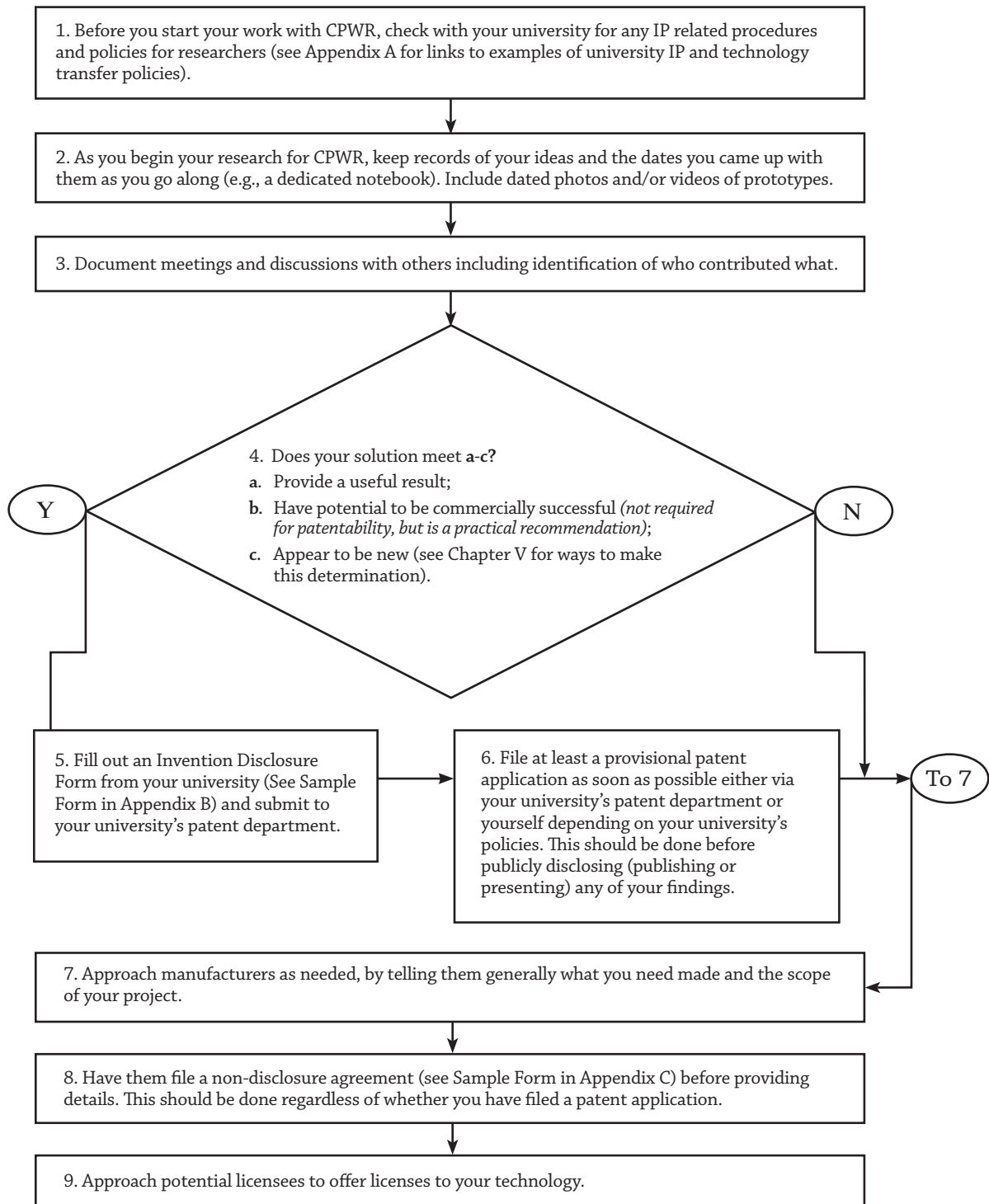
This Guide was developed in response to a recommendation resulting from the Symposium. It is intended as a guide to help you identify issues that may come up during your work. This Guide is not legal advice. You should check your university's or organization's guidelines and policies for patents and licensing, and/or contact an intellectual property lawyer to obtain legal advice.

CPWR has deliberately moved its National Construction Center from surveillance and needs determination to intervention evaluation, and then towards dissemination of evidenced-based best practices – research to practice (r2p).



II

Key Steps and Questions to Consider



III

What is Intellectual Property?

Intellectual property (IP) is a legal concept that encompasses creations of the mind, such as inventions, writings, designs, symbols, computer programs, and works of art. There are many types of intellectual property, but this Guide will focus on the types that you are most likely to develop as part of your work. For the purposes of this Guide, the safety and health products and materials you develop through your research will be referred to interchangeably as your “intellectual property,” “invention,” “idea,” or “concept.”

In the United States and many other countries, intellectual property can be protected in a number of ways. For example, inventions can be protected under patent laws if you obtain a patent, product brands can be protected under trademark laws, and articles or publications can be protected under copyright laws.

Protecting IP soon after you develop it may allow you or your employer to keep others from using what you developed, or may allow you to be paid (via a license agreement) by others who want to use your development.

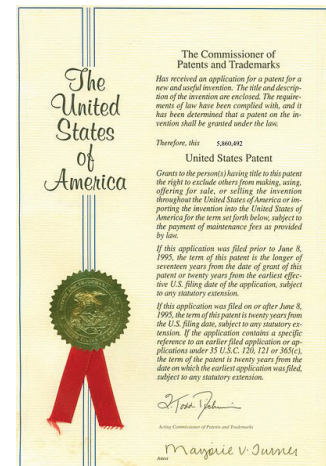
The pros and cons of protecting IP will be covered in more detail later in this Guide. For now, the following list covers some important terms that will be used throughout the Guide.

Patent

A U.S. patent is a legal document issued by the U.S. Patent and Trademark Office (USPTO) that gives an inventor the right to exclude others from making, having made, using, selling, offering for sale, or importing the inventions that are defined in the patent.

Patents are often considered the most powerful of the different types of intellectual property protection as they protect the idea behind a new, non-obvious, and useful apparatus, machine, product, process, or method. A patent gives its owner a monopoly on that technology for 20 years from the date the patent application is filed.

A patent typically contains a short abstract, a description of the problem with prior approaches, a set of drawings or flowcharts, a detailed description of the invention with references to the drawings or flowcharts and, at the end of the patent, a set of “claims.” Claims are single-sentence definitions of the legal boundaries of the invention.



Trademark

A trademark is a word (or words), name, symbol, or design, or any combination thereof, used by one company to distinguish its goods or services from those of other companies. Trademark rights can allow you to exclude others from using the same or similar trademark in commerce for a similar product or service, or sometimes even for different products or services. Trademarks can automatically qualify for some legal protection without filing any papers with the government, but obtaining a trademark registration from the USPTO typically provides broader and more significant protection.

Copyright

A copyright gives an author or creator of a literary, musical, or other artistic work the right to exclude others from copying that work. If you write an article, paper, or software program, for example, it is automatically entitled to certain protections under the U.S. copyright laws. Registering your work with the U.S. Copyright Office can provide added protections under the law.

License

A license, in the context of intellectual property, is a written agreement between the owner of some type of intellectual property and someone who wants to use that intellectual property. A patent license agreement, for example, often authorizes a “licensee” to make, use, or sell products that are covered by the “licensor’s” patent; in turn, the licensee usually agrees to pay the licensor for that right. Some intellectual property licenses require a single, upfront payment, while others require running royalty payments that are based on a certain percentage of the sale price of a covered product multiplied by the number sold during a given period.

IV

The Implications of the Leahy-Smith America Invents Act, also called the Patent Reform Act of 2011, on Technology Transfer

When the Leahy-Smith America Invents Act became law in 2011, it significantly changed certain aspects of patent protection in the United States. Most importantly, beginning in 2013, the U.S. patent system changed from a first to invent (FTI) system to a first to file (FTF) system in order to be more in line with most other countries' patent systems. Under the prior FTI system, a patent owner could rely on his/her records to establish a date of invention well prior to the filing date of his/her patent application. That earlier date of invention could give him/her priority over someone who filed a similar patent application, but whose records of invention show a later invention date.

Under the current system, invention records cannot be used to show priority over someone else's patent. However, as discussed in Section X, "Alternatives to Patenting and Licensing," these records can still be useful in certain scenarios, such as if someone asserts a later patent against your product (known as a "prior user defense" to patent infringement). Under the new FTF system, the filing date of your patent application becomes much more important to you as a patent inventor or owner, as it is the determining factor of "priority" between two competing patents and it is the date that establishes what qualifies as "prior art" against your patent.

The bottom line under the new law is this: file your patent application as soon as possible after you come up with your key concept. If you don't have the time or money to file a complete patent application, or if you think there will be many more related details to be developed, you should at least file a "provisional" patent application. A provisional patent is a great tool for quickly and inexpensively getting something on file to establish your priority date; it can be in any format. There are no requirements for an abstract, claims, or any other specific sections of the document. It can be a set of slides used in a presentation, an article, or even a set of notes and drawings. Then, as you develop those secondary details, you can file another provisional application to include them. Within a year of filing your first provisional application, you must file a complete patent application (known as a "utility patent application") to obtain a patent. If you do not file a utility patent application within a year, your provisional application becomes abandoned. That utility application should include the substance of any of your provisionals filed within the last year, and "claim priority" to those applications. That way, you have a first "priority date" established by the first provisional application for your ultimate patent.

A provisional patent is a great tool for quickly and inexpensively getting something on file to establish your priority date . . .

V

How Do I Determine Whether to Pursue Intellectual Property Protection?

During your safety and health research, you are likely to develop new ideas and, hopefully, a solution to the problem outlined in your study proposal. Oftentimes, the new development could be a new tool, modification to an existing tool, or a new method of performing a particular construction task. You may also come up with a name for the tool, modification, or technique.

So the question to ask yourself is, “Should I try to protect any of this and if so how?” The efforts to protect your intellectual property may not be trivial; obtaining a patent, for example, can cost thousands of dollars, or even tens of thousands when you add in fees for a patent lawyer. In addition, patenting a safety design might limit its use, especially if you demand too much money from manufacturers that are interested in commercializing it. Along these lines, some manufacturers are reluctant to talk to inventors with patents, or patent applications pending, for fear of having to pay royalties if they adopt the technology. Since you will determine the amount of money you demand for licensing your patented technology, however, you can control the balance of making money versus spreading your safety design throughout the construction industry.

In general, protecting your IP may be to your advantage for a number of reasons, including:

- It can allow you to keep other companies from using your technology, so that you can be the only one to sell your commercialized product;
- It can allow you to license your technology to other companies in exchange for license fees. The license fees can be used to support your commercialization efforts; and
- It can help ensure that your technology actually reaches the construction industry as a commercial product by giving your partners, such as your manufacturing company or investors, confidence that your technology (and thus their investment) is protected from copyists.

As you work on your development you can take certain steps in case you ultimately decide to seek IP protection. The type of protection you ultimately seek will depend on what you develop and what you plan to do after development.

Patent Protection

You should at least consider seeking patent protection if you develop a new or improved machine, device, tool, modification, method, or process. As noted earlier, having a patent on your new invention will: 1) give you exclusivity – you will be the only one in the market that is allowed to sell your newly invented technology; 2) allow you to license your patent to others and receive licensing payments in exchange (see Section VIII for more on licensing); and 3) help your efforts to obtain external funding. If you need investors to commercialize or further develop

your IP, having an issued patent or even a pending patent application that covers your new development can significantly help your efforts because it can give investors confidence that your idea and their investment are protected from copyists.

Before you expend the energy to put together a patent application on your new idea, however, you should make sure that it is in fact new and not an obvious variation of a pre-existing technology. This should be one of the first things you do after you have conceived of an idea that you think may have some commercial use and value. If your “new idea” turns out to have already been done by someone else, or if your “new idea” is an “obvious” variation on things that have previously been done by others, the U.S. Patent Office will reject your patent application. You can still pursue this idea commercially, but you would not be entitled to patent protection.

To get a general confidence level for whether your idea has been done before (i.e., that it is new and non-obvious), you can search databases of prior patents to see if anyone has already obtained a patent on the same or similar concept. Your university or employer may have a patent or IP department that can help with this type of searching and analysis. There are also many online databases available, including the U.S. Patent and Trademark Office (www.uspto.gov) and Google Patents (www.google.com/patents). If you find pre-existing technology (referred to as “prior art” in the patent business), a patent attorney or your university/employer’s patent department can give you guidance on whether it is too close to your own invention to make pursuing a patent worthwhile, and also whether any of the prior patents could be used to stop you or your university/organization from commercializing your idea. Some university patent departments may also conduct the prior art search for you, so contact your university early to determine how much help and guidance they can provide (See Appendix A: for links to examples of university policies).

It is important to note that you do not have to actually build your new idea to obtain a patent on it – just conceiving of it in enough detail that it could be built or practiced is sufficient. Once you have developed the idea at this level, you can file a patent application. As explained in Section II: Key Steps and Questions to Consider (i.e., step 6) and Section IV: The Implications of the Leahy-Smith America Invents Act, also called the Patent Reform Act of 2011, on Technology Transfer, filing a “provisional patent application” is an easy and inexpensive way to establish an early date of your invention. This date is important because, due to changes in U.S. patent law in 2013, the first date that you file a patent application (a regular patent application or a provisional patent application) is now what determines your priority as compared to others who invent or publish similar concepts. Many inventors simply file a provisional patent application that is a copy of a presentation or article that they had prepared for other reasons (e.g., for presenting at a conference or to investors) that describes their invention, as a provisional patent application. The sooner you get a provisional application on file, the earlier your “date of invention” is established under the law. It is important to file a provisional or regular (“utility”) patent application before publicly disclosing your invention or offering any products for sale. In the U.S., there is a one-year grace period after your publication in which you must file an application or lose your rights, but publicly disclosing your invention prior to filing a patent application (provisional or utility) can cause you to lose corresponding patent rights in

other countries. For example, you could be considered to have publicly disclosed your invention if you published it in an article or presented it at a conference. So to be safe, file your presentation or article as a provisional application before you publicly disclose your invention.

While there are benefits to pursuing patent protection, there are also misconceptions about what that protection covers. Many people think that having a patent that covers their product gives them the right to sell their product; this is not accurate. If, for example, someone else owns an earlier patent that covers any aspect of your product, that patent owner could potentially stop you from using or selling any product that is covered by his/her patent.

Since this is a strange concept to many, the following is a very basic example. Assume that none of the chairs in the world had arms and you invented the first armchair. If you obtained a patent on armchairs you could stop others from making or selling armchairs, and you might think that you would have the right to make and sell armchairs. Not necessarily. If someone else before you had a patent on the basic concept of a chair (e.g., 4 legs, a seat, and a back), he could use his patent to stop you from making any chairs with 4 legs, a seat, and a back – regardless of what you added on to the basic chair to make it different and regardless of whether you have a patent on your new addition. Nearly all inventions have this dilemma because there is almost always a patent on a more basic concept and most inventions are improvements on prior technology.

So then why pursue a patent at all? One reason, because your improvement may have value in the market over and above the basic prior technology. Remember the company that has a patent on the basic chair? If that company wants to start making and selling armchairs, it would not be able to unless it has a patent license from you. So having a patent would allow you to “cross-license” your patent with the basic chair company’s patent and then both of you could make chairs with or without arms. In addition, having a patent would give you the option to license the armchair patent to other manufacturers and collect royalties (presumably, if these other manufacturers are already making basic chairs, they would already have a license from the basic chair patent holder). A patent can also help ensure that your idea gets to the construction industry in the first place by giving your investors, manufacturers, distributors, and other partners confidence that your idea and their investment are protected from copied versions, as well as help to ensure that implementations of your idea that reach the industry meet your quality and safety standards. This can be done by including quality and safety requirements in license agreements that you enter into with manufacturers, and then promoting the quality and safety of the patented versions.

Trademark Protection

If your new idea results in a product, and that product is identified by a unique name, logo, symbol, and/or design, you may wish to consider seeking a trademark registration to protect your mark. Trademark protection cannot stop others from using the basic idea of your invention, as you will need a patent for that, but trademark protection can keep others from using the same, or a confusingly similar, name and/or mark for their competing product.

VI

Ownership: Who Will Own Any Intellectual Property Developed Under My Agreement?

Most NIOSH funded agreements are governed by the Bayh-Dole Act, codified as 35 USC § 200-212 and 37 CFR 401. In very general terms, the Bayh-Dole Act requires that contracted inventors, small businesses, and/or non-profit organizations must retain ownership rights in patents they develop pursuant to federal grants and comply with certain obligations. 37 CFR 401.14 (See Appendix D) sets forth the “standard patent rights” with which NIOSH fund/grant recipients must comply if they pursue patent protection. (*Note: There is no requirement under the Bayh-Dole Act that forces you to pursue patent protection for any of your developments, and this type of requirement is not common in agreements, but you should check your university and CPWR/NIOSH agreements to be sure they do not have such requirements.*) These standard patent rights require the researcher to:

1. Grant licenses to the patents rather than assign their title to them – this means that your university/employer cannot sell the patent to another entity, but can license others to use the patented technology;
2. Disclose the government’s interest in patent applications and notify the government before abandoning any patent application – patent applications can be abandoned at any time after being filed – to be safe, notify both NIOSH and CPWR before abandoning any patent applications;
3. Share the income they received with the inventors – how much to share is left up to individual institutions (e.g., your university will have discretion on the amount);
4. Use any residual income retained by the institution for research and education – your university is given discretion to determine how much income goes to inventors versus research and education;
5. Grant a royalty-free, non-exclusive license to the U.S. Government for its own use;
6. Require licensees to manufacture products in the U.S. that are to be sold in the U.S.; and
7. Give preference to small businesses (as defined in section 2 of Pub. L. 85-536 (15 U.S.C. 632)).

As a final safeguard of the Bayh-Dole Act, the U.S. government retains the right to grant a compulsory license to others if it is in the public interest and/or if the patent owner is deemed to not be commercializing the invention or to have somehow breached its contract. This safeguard is referred to as “march-in *rights*” and is codified in 35 U.S.C. 203. (See Appendix D for the exact Bayh-Dole requirements.)

As noted earlier, you should check your agreement with CPWR/NIOSH. The following is an example of the Bayh-Dole language typically found in CPWR agreements. It provides that the

“Sub-Grantee” (e.g., you or your university) will retain ownership of the IP that you develop, but that CPWR will be given a license to use it. This language also requires that CPWR retain ownership of any IP developed by CPWR employees. If IP is developed jointly by inventors from CPWR and inventors from a Sub-Grantee, then this language indicates that both CPWR and the Sub-Grantee would jointly own the IP.

COPYRIGHTS AND INVENTIONS

1. *The Sub-Grantee agrees to promptly notify CPWR of any Sub-Grantee intellectual property conceived and/or made during the contract period under this Agreement. Rights to inventions, improvements, and/or discoveries relating to the project and made solely by employees of the Sub-Grantee, whether or not patentable or copyrightable, shall belong to the Sub-Grantee. Inventions, improvements, and/or discoveries relating to the project and made solely by employees of CPWR, whether or not patentable or copyrightable, shall belong to CPWR.*

If any copyrightable material(s) are developed in the course of or under this Agreement, all parties shall have a royalty-free, nonexclusive, and irrevocable right to reproduce, publish, or otherwise use such materials, and to authorize others in the Federal Government to do so for Federal government purposes.

2. *Acceptance of grant funds obligates Sub-Grantee to comply with the “standard patent rights” clauses in 37 CFR 401.14 (See Appendix D to this Guide).*

If, for some reason, your contract funding does not fall under the Bayh-Dole Act, then you will need to determine who will retain ownership of any IP you develop. If you have an employment agreement with your university, you should check for any constraints or requirements that may impact your IP protection efforts. For example, some employment agreements might require that you assign any IP you develop to your university.

In addition, your CPWR/NIOSH contract may have other IP-related clauses that apply to your situation, such as:

Federal Information Security Management Act (FISMA) – if your grant is governed by FISMA, then you might automatically retain ownership of intellectual property developed under your agreement.

Agency for Toxic Substances and Disease Registry (ATSDR) – if your grant is governed by ATSDR, then you may have certain restrictions as set forth in the sample contract language that follows:

Project activities which are approved for contracting pursuant to the prior approval provisions shall be formalized in a written agreement that clearly establishes the relationship between the recipient and the third party.

The written agreement shall, at a minimum:

- a. State or incorporate by reference all applicable requirements imposed on the contractors under the terms of the grant and/or cooperative agreement, including requirements concerning technical review (ATSDR selected reviewers), ownership of data, and the arrangement for copyright when publications, data, or other copyrightable works are developed under or in the course of work under a PHS grant supported project or activity.*
- b. State that any copyrighted or copyrightable works shall be subject to a royalty-free, nonexclusive, and irrevocable license to the government to reproduce, publish, or otherwise use them, and to authorize others to do so for Federal government purposes.*
- c. State that whenever any work subject to this copyright policy may be developed in the course of a grant by a contractor under a grant, the written agreement (contract) must require the contractor to comply with these requirements and can in no way diminish the government's right in that work.*
- d. State the activities to be performed, the time schedule for those activities, the policies and procedures to be followed in carrying out the agreement, and the maximum amount of money for which the grantee may become liable to the third party under the agreement.*
- e. State non-conflict of interest concerning activities conducted for ATSDR and site-remediation activities for other parties.*

So, while ownership of your IP may seem complicated, it is important to look into. Many inventions will be owned by the researcher-inventor or more likely his/her employer, but you should check any agreements you have with CPWR/NIOSH and with your employer to be sure. Most universities require that they retain ownership of their researchers' inventions, but there are always exceptions. It is best to check with your university before you begin your research, so you have a complete understanding from the outset. (See Appendix A: for links to examples of university policies.)

VII

Inventorship: Who Should be Named as Inventors or Co-inventors on Any Patent Application?

One of the questions you will ultimately need to answer is who should be named as an inventor on your patent application. This section covers: Why is inventorship important? Who is an inventor? Who is not an inventor? How do inventorship conflicts occur? How are inventorship conflicts resolved? How are inventorship errors corrected?

Why is inventorship important? First, inventorship is the root of ownership in the sense that inventors automatically own their patent application until they assign any of those rights to an employer or to any other entity. In the typical university situation a researcher owns his/her invention initially, but has a contract with the university (e.g., employment contract) that requires him/her to assign the invention over to the university. The same is true for most employee-employer situations where the invention is within the scope of the employment. However, there are always exceptions, so check with your university/employer to be sure.

In the situation where there are two or more joint inventors that come up with an invention, they initially share ownership until they assign their rights to their universities or employers. Then, the universities/employers become joint owners of the IP. In that situation, each owner is allowed to license or enforce the resultant patent. If one of them grants a license to a manufacturer, for example, then the other owner cannot stop that manufacturer from using the licensed technology. Thus, joint ventures where the inventors are from different organizations can sometimes get a little tricky if the organizations do not cooperate.

Also, a patent can be held invalid if the named inventors do not name all of the actual inventors, or if they include a person who was not a true inventor. While an inadvertent mistake in inventorship is fixable, intentionally false inventorship can make a patent unenforceable.

An inventor is a person who conceived of the subject matter of one or more of the issued “claims” of a patent.

Intentionally false inventorship situations have arisen in the past where the named inventor excluded an inventor from a different company to avoid sharing licensing income with the excluded inventor’s company. Only a federal court can rule that inventorship was intentionally false, but as long as you make a good faith attempt to get the inventorship right, you will probably not have a problem even if you get the inventorship wrong. Keep good notes about who contributes what to your ideas, and talk to your university patent department or patent attorney for guidance if you have questions.

Who qualifies as an inventor? An inventor is a person who conceived of the subject matter of one or more of the issued “claims” of a patent. Each claim defines the legal boundaries of an aspect of the invention. A patent can cover more than one aspect of invention. The act of “conceiving” or “conception”

is the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention as it is to be applied in practice. Others might qualify as joint inventors to your patent if they contribute ideas to your invention that end up being included in the claims of your patent, even though they did not:

- (1) Physically work together with you or at the same time (e.g., you consulted with someone over the phone who gave you ideas);
- (2) Make the same type or amount of contribution (e.g., you conceived of the main idea, but they gave you secondary ideas and those secondary ideas are included in your patent claims as limitations); or
- (3) Make a contribution to the subject matter of every claim of your patent. If they contributed even one idea that is recited in one of your claims, they *could* be co-inventors.

The key is whether a potential joint inventor made a contribution to a claim limitation while understanding the scope of what the complete claim coverage would be. Using the earlier armchair example (see Section V), assume you have already conceived of putting arms on chairs, but you don't know whether to use a certain type of glue, nail, screw, or some other fastener. You go to a friend and explain that you are developing armchairs, but you don't know the best way to attach them to the back and seat of the existing chair.

Your friend gives you some wood glue and teaches you how to carve an insert into the chair, and glue and insert a piece of wood. If any of the claims in your patent end up including limitations such as the arm being glued and inserted into a recess in the back of the chair, then your friend is likely to be a co-inventor under the law. The reason is that he contributed something that ended up being a claim limitation in one of your patent claims and, at the time he made that contribution, understood the full scope of what the invention was going to be.

Now let's change the scenario a bit for illustrative purposes. Assume that when you approached your friend you instead asked, "What's a good way to fasten a wood support to a chair at roughly a 90 degree angle?" In this situation, your friend did not have the complete invention in his mind because you did not disclose the other aspects of the wood support. In this modified scenario, your friend is not likely a co-inventor.

Patent claims often change between the time a patent application is filed and the time the patent is issued. This happens for a number of reasons, including requirements from the Patent Office to narrow the scope of the claims after examining the prior art. (*Note: This does not mean that you can add new ideas to your patent application after filing it; instead you can add details to your claims after filing the application as long as those details are already included somewhere else in the patent application.*) When such claim amendments are made, it is important to think about whether the detail you add to a claim came from someone else and, if it did, whether the inventorship might need to be amended.

Who is not an inventor? An inventor may solicit the assistance of others when perfecting the invention without "losing" any patent rights. The basic exercise of ordinary skill in the relevant

technology, without an inventive act, does not make one a joint inventor. A technician, merely carrying out the inventor's construction instructions or testing an invention, does not become an inventor without performing further inventive activity. So what constitutes "inventive activity"? As a general guideline, if another person is testing your invention for example, and she says, "you need a bolt that is 2.5 inches long" or "this will work better if it's made out of aluminum," those types of suggestions will only make her a co-inventor if her suggestion ends up being included in one of the claims of your patent.

Also, if someone teaches you a concept and you implement that concept into your invention, that person is not an inventor if he did not know about the rest of your invention. That person could be a co-inventor, however, if he taught you that concept after you explained to him the problem you were working on and the solution you had thought up at that point, so that he understood the rest of your invention when he made the contribution. If you already knew about the concept before the person suggested the solution to you, then that other person is not a co-inventor.

One way to get advice or input from others without having to include them as inventors on your patent application is to ask them questions without telling them the entirety of what you think your invention will be at that time.

How do inventorship conflicts occur? Often inventions occur in a meeting or other group setting and attendees may not remember who came up with which ideas. For that reason, keep accurate meeting minutes from the beginning of your research. The true inventors for a patent application are not known until the claims of the patent are written, since the test for inventorship focuses on who contributed each of the elements of each patent claim.

How are inventorship conflicts resolved? Since the "inventor" status of a person is linked to the claim limitations, the most common way to resolve conflicts is for each of the involved persons to indicate which aspects of the patent claims contain their ideas or contributions.

How are inventorship errors corrected? Inventorship can be changed at any time during the patent application process, or even after the patent has been issued. When an error is found, immediate steps should be taken to correct the inventorship. As long as an inventorship error was not made with "deceptive intent" (i.e., intentionally false inventorship) it can be corrected before or after a patent is issued.

Inaccurate inventorship on an issued patent made with deceptive intent (of named or unnamed inventor) often results in unenforceability of the patent if the patent is asserted in a litigation.

VIII

Licensing My Intellectual Property to Others via Licensing Agreements

As explained in Section VI, an IP license is simply an agreement or contract between the IP owner (the “**licensor**”) and someone who wants to use that IP (the “**licensee**”). IP licenses can be structured in many different ways and for many different purposes. IP licenses can be used, for example, for licensing a patent, a trade secret, or a trademark. You can even grant a patent license to someone while your patent application is still pending, for example, to assure your manufacturer that they will have the rights to continue making products once your patent is issued. Patent and patent application licenses are likely covered by the Bayh-Dole Act provisions (37 C.F.R. 401.14, Appendix D, and discussed in Section IV), so be sure to check those before trying to sign up licensees.

In some ways, the most straightforward type of IP license is one in which you (the licensor) grant rights to a company that can make and sell the technology covered by your patent in exchange for a licensing fee. The licensing fee can be structured in any manner, including a single up-front payment, a schedule of periodic fixed payments, or payments based on a “**running royalty**” (an agreed upon percentage of the sale price of covered products multiplied by the number of covered products sold).

Licenses can be “**exclusive**” or “**non-exclusive.**” An exclusive license guarantees the licensee that you will not grant any other licenses to the covered IP, and a non-exclusive license allows you to grant licenses to as many other licensees as you want. Typically, a licensee pays much more for an exclusive license than a non-exclusive license.

If you decide to commercialize your invention yourself, you can still grant a non-exclusive license to other companies to increase your revenue. Many inventors take this approach to create a revenue stream to help pay for manufacturing and startup costs associated with releasing their own product.

Anytime you decide to have your product made and sold with the assistance of others, you will need to grant them limited rights to use or sell your IP as appropriate. For example, if you want to hire a manufacturing company to make your new invention, or a distributor or reseller to distribute or sell your final products, then you will want to have a manufacturing, distributing, or reselling contract, respectively, with that company. Each of these types of agreements should have some type of IP license clause that gives the licensee the rights to do what you need the licensee to do, but restrict the licensee from circumventing your IP rights. For example, you may want to restrict your manufacturer from making the covered technology for anyone else but you, or you may want to allow your manufacturer to make the covered technology for others as long as you are paid a royalty for those products.

If you decide to commercialize your invention yourself, you can still grant a non-exclusive license to other companies to increase your revenue.

IX

Ensuring the Integrity of the Safety Intervention When Entering Into a Licensing Agreement with a Manufacturer

How do you ensure that your manufacturer or other licensee implements your new invention appropriately? You can incorporate such a requirement into your license or manufacturing agreement. This is commonly done when licensing a trademark because a licensee who attaches your trademark to an inferior product can reduce the value of your trademark. This is also common in manufacturing agreements where you will be responsible for selling the end product, but it is not very common with basic patent licenses to other manufacturers and resellers. Nevertheless, you can include a similar restriction in any patent license or manufacturing agreement in order to ensure that your development is manufactured to achieve the design objectives. Here are some examples.

Trademark Example 1:

QUALITY CONTROL: Licensee will not do or permit to be done any act or thing that might in any way impair the reputation, goodwill, distinctiveness or validity of the Trademark, or the rights of Licensor in the Trademark.

Trademark Example 2:

QUALITY CONTROL: Licensee agrees that the nature and quality of the Licensed Services provided by it in connection with the Mark, and all related advertising, promotional and other related uses of the Mark by Licensee with respect to the Licensed Services, shall conform to the reasonable quality standards now in existence by Licensor. Licensor acknowledges that Licensee's current use of the Mark conforms to Licensor's reasonable quality standards. Upon Licensor's reasonable request, Licensee agrees to provide Licensor with representative samples of advertisements bearing the Mark in connection with the Licensed Services. Following the receipt of written notice from Licensor that a particular use of the Mark with the Licensed Services by Licensee is inconsistent with the standards of quality of services provided by or for Licensor under its Mark (as reasonably determined in good faith by Licensor), and receipt of a detailed explanation as to the manner in which the particular use of the Mark with the Licensed Services by Licensee is inconsistent with the standards of quality of services provided by or for Licensor under its Mark, Licensee shall discontinue such offending use of the Mark.

Patent Example:

QUALITY CONTROL: Licensee will not do or permit to be done any act or thing that might in any way impair the safety, quality, or integrity of products made that use the licensed technology. Licensor may inspect Licensee's manufacturing facility as well as any plans, prototypes, or end products made that implement the licensed technology, and may require changes to maintain the safety, quality, or integrity of end products that use the licensed technology.

Even more specifically, assume your invention can reduce dust by 99.5% and you want to ensure that licensees do not cut corners that impact the dust reduction. You can include a requirement that the licensed products must reduce dust by 99.5% and that you may inspect and test products to ensure this requirement is met. You may even include a requirement in your license agreement that allows you to bring in outside experts to verify aspects that are outside of your expertise (e.g., manufacturing processes and other quality control issues).

X

Alternatives to Patenting and Licensing

If you decide that obtaining patent coverage for your development and trying to license your patent to others is too much of a cost or effort, then there are a few inexpensive and easy things you may still want to consider doing. These include:

- Keep records of what you developed and when, including any evidence showing that others witnessed your developments;
- Publish any papers or presentations that you have created; and/or
- Seek an investor to pursue a patent for what you have created.

Keep records: At the very least, keep records of what you developed and when. You can do this in a notebook, with photos (preferably that include the date), or videos. This process should be done regardless of whether you are going to pursue patent protection, and should be done from the beginning of your research. The amount of detail should be enough to illustrate the concepts you believe are needed to implement the ideas you conceived or tested on that day. In addition, whenever possible, have someone witness a key development, and have the witness initial that page in your notebook or appear in a photo or video of your development in action. This type of evidence may be helpful in some circumstances if you eventually commercialize your development and someone else tries to stop you with his or her patent. In such a scenario, your records might give you rights to continue if, for example, your records sufficiently predate the filing of that other person's patent application. While your earlier records cannot support an earlier invention date for supporting a patent application that you might file, your earlier records can be a defense to patent infringement if someone asserts their patent against you and you were in fact earlier.

By publishing your results in either a paper or at least a set of presentation slides, you can better establish proof that you developed what you did when you did it.

Publish your results: By publishing your results in either a paper or at least a set of presentation slides, you can better establish proof that you developed what you did when you did it. One reason to do this is to protect yourself in case you end up developing a product and someone else obtains a patent on similar technology after you. The publication of your paper or presentation qualifies it as "prior art" against any patent applications that are filed by others after your publication. So assume you commercialize a product and are later approached by someone alleging that they have a patent covering your product. If that patent indeed covers your product, you may be required to stop making your product or pay a license fee to the patent owner. However, if you had published your developments, you might have a defense that would help you and/or your manufacturer. In order for your publication to help you in this situation, it must have been published prior to that patent owner's first patent application date,

and it should be very close to what your commercial product ends up as. Under this scenario, the patent owner's patent claims are likely to be invalid if they cover your commercial product because they would also likely cover your prior art publication. This technique is not foolproof as there could be nuances in the patent claims that distinguish over your prior art publication, but still cover your commercial embodiment, for example. Given its low cost, however, this technique can offer very cost-effective basic protection against other patent owners.

There are many ways to turn your paper or presentation into a publication, but perhaps the easiest way is via the internet. You can post them on your own website or any website that may have an interest in your development – check with your employer and CPWR as they may be able to publish on their websites or know of relevant sites to approach. Before publishing, however, make sure to check for publication restrictions in your employer and/or CPWR agreement. If any of your work is deemed confidential, for example, you may be limited in what you are allowed to publish. In addition, if you plan to publish in a peer-reviewed journal, you should check to find out if the journal in which you hope to publish has any restriction on prior publication.

Seek an investor: You should check your agreement(s) with your employer and/or CPWR and with your university's patent department to make sure there are no restrictions on reaching out to external investors or manufacturers. If there are none, you may be able to obtain investors for funding the patenting process or find an investor to take it over entirely. However, if you approach a potential investor or a manufacturing company for this type of purpose, have them sign a Non-Disclosure Agreement before telling them about your new development. This can protect you from having them take your new idea and commercializing it, especially if you did not yet have a patent application on file. An example of a Non-Disclosure Agreement is included in Appendix C.

APPENDIX A: Links To Examples of University Intellectual Property and Tech Transfer Policies

- 1. Colorado State University:**
 - a. [Contracting Services: Intellectual Property](http://www.contracting.colostate.edu/FAQ-Intellectual-Property.aspx)
(<http://www.contracting.colostate.edu/FAQ-Intellectual-Property.aspx>)
 - b. [Research Foundation](http://www.csurf.org/) (<http://www.csurf.org/>)
- 2. Duke University:**
 - a. [Office of Research Support - Intellectual Property Rights](https://ors.duke.edu/orsmanual/intellectual-property-rights)
(<https://ors.duke.edu/orsmanual/intellectual-property-rights>)
 - b. [Inventions, Patents, and Technology Transfer](https://ors.duke.edu/orsmanual/inventions-patents-and-technology-transfer)
(<https://ors.duke.edu/orsmanual/inventions-patents-and-technology-transfer>)
- 3. Georgia Tech:**
 - a. [Research Administration](http://www.gtrc.gatech.edu/research-administration/) (<http://www.gtrc.gatech.edu/research-administration/>)
- 4. Harvard University:**
 - a. [Office of Technology Development](http://www.otd.harvard.edu/) (<http://www.otd.harvard.edu/>)
 - b. [Intellectual Property Policy](http://www.otd.harvard.edu/resources/policies/IP/) (<http://www.otd.harvard.edu/resources/policies/IP/>)
- 5. Northeastern University:**
 - a. [Intellectual Property Information](http://www.northeastern.edu/governmentrelations/public_policy/intellectual_property_info.html)
(http://www.northeastern.edu/governmentrelations/public_policy/intellectual_property_info.html)
- 6. Rutgers:**
 - a. [Office of Technology Commercialization](http://otc.rutgers.edu/) (<http://otc.rutgers.edu/>)
 - b. [General Information for Faculty](http://otc.rutgers.edu/faculty) (<http://otc.rutgers.edu/faculty>)
- 7. University of California Berkeley:**
 - a. [Office of Intellectual Property & Industry Research Alliances](http://ipira.berkeley.edu/uc-patent-policy)
(<http://ipira.berkeley.edu/uc-patent-policy>)
 - b. [Patent Policy](http://ipira.berkeley.edu/uc-patent-policy) (<http://ipira.berkeley.edu/uc-patent-policy>)
- 8. University of California San Francisco:**
 - a. [Office of Research: Office of Technology Management](http://ita.ucsf.edu/) (<http://ita.ucsf.edu/>)
 - b. [School of Medicine Patents and Intellectual Property Management](http://policies.medschool.ucsf.edu/patents-and-intellectual-property-management)
(<http://policies.medschool.ucsf.edu/patents-and-intellectual-property-management>)
 - c. [Innovation, Technology & Alliances](http://ita.ucsf.edu/researchers/policies) (<http://ita.ucsf.edu/researchers/policies>)
- 9. University of Iowa:**
 - a. [Operations Manual: Part V. Chapter 30: Intellectual Property Policy](http://www.uiowa.edu/~our/opmanual/v/30.htm)
(<http://www.uiowa.edu/~our/opmanual/v/30.htm>)
- 10. University of Massachusetts Lowell:**
 - b. [Office of Commercial Ventures and Intellectual Property Policies and Forms](http://www.uml.edu/research/cvip/)
(<http://www.uml.edu/research/cvip/>)
- 11. University of Puerto Rico:**
 - a. [Research and Technology – Office of Intellectual Property and Commercialization](http://acweb.upr.edu/vpit/economicd/eco_develop.html)
(http://acweb.upr.edu/vpit/economicd/eco_develop.html)
 - b. [Patenting and Commercialization Process](http://acweb.upr.edu/vpit/economicd/eco_docs/patentprocess.pdf)
(http://acweb.upr.edu/vpit/economicd/eco_docs/patentprocess.pdf)
- 12. Washington University in St. Louis:**
 - a. [Compliance & Policies](http://wustl.edu/policies/) (<http://wustl.edu/policies/>)
 - b. [Intellectual Property & Research Policies](http://wustl.edu/policies/intellectual.html) (<http://wustl.edu/policies/intellectual.html>)
- 13. Yale University:**
 - a. [Office of Cooperative Research:](http://www.yale.edu/ocr/) (<http://www.yale.edu/ocr/>)
 - b. [Patent Policy](http://www.yale.edu/ocr/pfg/policies/patents.html) (<http://www.yale.edu/ocr/pfg/policies/patents.html>)

APPENDIX B: Sample Invention Disclosure Form

INVENTION DISCLOSURE FORM

1. The purpose of this form is to call attention to your new development. If you are in doubt as to whether you are the inventor, so state and indicate the names of those who might be the inventor or a co-inventor.
2. If more space is needed for any section, attach additional pages as needed.
3. Fill out this form and submit to your patent department as soon as possible after conceiving of your invention. It is better to submit an incomplete form than to delay submission in the interest of completeness.
4. If sketches or photographs are available, attach them to this form. Do not destroy any original sketches.

DESCRIPTIVE TITLE OF INVENTION:

POTENTIAL INVENTOR(S):

NAME _____ EMPLOYER _____

RESIDENCE _____

NAME _____ EMPLOYER _____

RESIDENCE _____

NAME _____ EMPLOYER _____

RESIDENCE _____

NAME _____ EMPLOYER _____

RESIDENCE _____

INVENTION HISTORY:

(A) DATE OF CONCEPTION (WHEN FIRST THOUGHT OF):	(B) DATE, PLACE & TO WHOM FIRST EXPLAINED:
(C) DATE & IDENTITY OF FIRST-SKETCH:	(D) DATE & IDENTITY OF FIRST WRITTEN DESCRIPTION:
HAS THE INVENTION BEEN TRIED? <input type="checkbox"/> YES <input type="checkbox"/> NO PUT TO USE? <input type="checkbox"/> YES <input type="checkbox"/> NO SOLD? <input type="checkbox"/> YES <input type="checkbox"/> NO	
HAS ANY SAMPLE BEEN PROVIDED OR ANY DESCRIPTION (ORAL OR WRITTEN) OF THE INVENTION BEEN MADE OUTSIDE OF YOUR RESEARCH TEAM? <input type="checkbox"/> YES <input type="checkbox"/> NO	
IS ANY PUBLICATION OR DISCLOSURE OF THE INVENTION PLANNED OR LIKELY? <input type="checkbox"/> YES <input type="checkbox"/> NO	
ANSWER ALL FIVE QUESTIONS; IF ANY IS "YES," STATE DETAILS BELOW.	

DESCRIPTION OF INVENTION:

1. DESCRIBE THE PROBLEM TO BE OVERCOME – EXPLAIN THE EXISTING TECHNOLOGY* AND ITS WEAKNESS.

*LIST THE MOST PERTINENT EXISTING OR PRIOR PRACTICES, PATENTS, PUBLICATIONS, SALES LITERATURE, ETC., NOW KNOWN TO YOU WHICH ILLUSTRATE THE PROBLEM AND/OR OFFER MEANS TO OVERCOME IT – ATTACH COPIES IF POSSIBLE.

2. SUMMARY OF THE INVENTION – HOW TO OVERCOME THE PROBLEM – HOW THE INVENTION WORKS.

A. DESCRIBE THE NEW STRUCTURE, PROCESS OR MATERIAL AND HOW IT DIFFERS FROM THE PRIOR TECHNOLOGY. EMPHASIZE KEY OR NEW FEATURES.

B. EXPLAIN ADVANTAGES: NEW BENEFIT OR RESULT.

3. PROVIDE SKETCH(ES) IF AVAILABLE

USE PLAIN PAPER IF MORE SPACE IS REQUIRED. IF ENGINEERING DRAWING IS USED, PLEASE IDENTIFY NOVEL/INVENTIVE FEATURES. PLEASE IDENTIFY PERTINENT COMPUTER GRAPHICS, IF ANY.

WITNESSES' AND INVENTORS' SIGNATURES:

PLEASE COMPLETE THE REMAINING PAGES OF THIS REPORT AND SIGN IT BELOW AND HAVE TWO WITNESSES WHO UNDERSTAND ITS SUBJECT MATTER ALSO SIGN AS INDICATED.

INVENTOR'S SIGNATURE AND DATE

INVENTOR'S SIGNATURE AND DATE

INVENTOR'S SIGNATURE AND DATE

READ & UNDERSTOOD – WITNESS AND DATE

READ & UNDERSTOOD – WITNESS AND DATE

INVENTOR'S SIGNATURE AND DATE

APPENDIX C: Sample Non-Disclosure Agreement

This Non-disclosure Agreement, effective _____ by and between _____ and _____, each of which hereunder may be called a “PARTY” or collectively the “PARTIES”. The PARTIES agree that the following terms apply when one of the PARTIES (“Discloser”) discloses certain confidential and proprietary technical, business, or economic information concerning Discloser’s present and future products, including but not limited to, presently unannounced products to the other (“Recipient”) under this agreement (“Agreement”). All of such confidential and proprietary information is hereinafter referred to as “Discloser Information”. PARTIES are prepared to receive such Information as may be necessary, on the following terms and conditions:

1. Recipient agrees to treat Discloser Information in the same manner as it treats its own confidential and proprietary information of the same type.
2. Access to Information will be limited to only those employees of Recipient who require access for the aforesaid purpose.
3. Upon request, Recipient will return or destroy all user-accessible copies of Discloser Information.
4. Recipient agrees to hold all Information disclosed hereunder in trust and confidence for a period of one (1) year from the date of disclosure or until the Discloser Information is made public, whichever is less.
7. Each Party agrees not to disclose the terms of this Agreement without the prior written consent of the other, unless required by law or court order.
8. Nothing contained in this Agreement shall in any way restrict or impair Recipient’s right to use, disclose, or otherwise deal with any portion of Discloser Information which:
 - is or becomes generally available to the public through no wrongful act of Recipient;
 - was in Recipient’s possession prior to the time it was acquired from Discloser and was not acquired, directly or indirectly, from Discloser;
 - is required to be disclosed, in the opinion of Recipient’s legal counsel, by court order or operation of law;
 - is independently made available to Recipient as a matter of right by a third party; or,
 - is independently developed by or for Recipient by persons not having exposure to Information.
9. ANY INFORMATION WHICH IS OR WILL BE PROVIDED TO PARTIES UNDER THIS AGREEMENT IS PROVIDED "AS IS" WITH NO EXPRESS OR IMPLIED WARRANTIES WHATSOEVER, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. PARTIES SHALL HAVE NO LIABILITY FOR DAMAGES WHICH ARISE OUT OF PARTIES USE OF THE INFORMATION PROVIDED UNDER THIS AGREEMENT

10. Discloser shall identify to Recipient at the time of disclosure all information which is Discloser Information and provide Recipient with an opportunity to refuse to receive it. If the information is in written form, Discloser shall mark it as confidential and provide a copy to Recipient at the time of disclosure. If the information is given orally or via access to data captured in electronic media, then Discloser shall prepare a written, non-confidential summary of the Discloser Information and transmit such summary to Recipient within thirty (30) days of disclosure or access.

11. THIS AGREEMENT SHALL BE CONSTRUED AND THE LEGAL RELATIONS BETWEEN THE PARTIES DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE OF _____, WITHOUT GIVING EFFECT TO ANY CHOICE OF LAW RULES WHICH MAY DIRECT THE APPLICATION OF THE LAWS OF ANY OTHER JURISDICTION.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed by their respective authorized representatives to be effective as of the date first above written.

Recipient

Discloser

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

Date: _____

Date: _____

APPENDIX D: Applicable Statutes and Regulations

37 C.F.R. 401.14: Standard Patent Rights Clauses

TITLE 37–PATENTS, TRADEMARKS, AND COPYRIGHTS CHAPTER IV–ASSISTANT SECRETARY FOR TECHNOLOGY POLICY, DEPARTMENT OF COMMERCE PART 401–RIGHTS TO INVENTIONS MADE BY NONPROFIT ORGANIZATIONS AND SMALL BUSINESS FIRMS UNDER GOVERNMENT GRANTS, CONTRACTS, AND COOPERATIVE AGREEMENTS

Sec. 401.14. Standard patent rights clauses.

(a) The following is the standard patent rights clause to be used as specified in Sec. 401.3(a).

Patent Rights (Small Business Firms and Nonprofit Organizations)

(a) Definitions

(1) *Invention* means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321 et seq.). (2) *Subject invention* means any invention of the contractor conceived or first actually reduced to practice in the performance of work under this *contract*, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance. (3) *Practical Application* means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or government regulations, available to the public on reasonable terms. (4) *Made* when used in relation to any invention means the conception or first actual reduction to practice of such invention. (5) *Small Business Firm* means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used. (6) *Nonprofit Organization* means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c) and exempt from taxation under section 501(a) of the Internal Revenue Code (25 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

(b) Allocation of Principal Rights

The *Contractor* may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to

any subject invention in which the *Contractor* retains title, the Federal government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

(c) Invention Disclosure, Election of Title and Filing of Patent Application by *Contractor*

(1) The *contractor* will disclose each subject invention to the Federal Agency within two months after the inventor discloses it in writing to *contractor* personnel responsible for patent matters. The disclosure to the agency shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the *agency*, the *Contractor* will promptly notify the *agency* of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the *contractor*. (2) The *Contractor* will elect in writing whether or not to retain title to any such invention by notifying the Federal agency within two years of disclosure to the Federal agency. However, in any case where publication, on sale or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the *agency* to a date that is no more than 60 days prior to the end of the statutory period. (3) The *contractor* will file its initial patent application on a subject invention to which it elects to retain title within one year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The *contractor* will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application or six months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order. (4) Requests for extension of the time for disclosure, election, and filing under subparagraphs (1), (2), and (3) may, at the discretion of the *agency*, be granted.

(d) Conditions When the Government May Obtain Title

The *contractor* will convey to the *Federal agency*, upon written request, title to any subject invention-- (1) If the *contractor* fails to disclose or elect title to the subject invention within the times specified in (c), above, or elects not to retain title; provided that the *agency* may only request title within 60 days after learning of the failure of the *contractor* to disclose or elect within the specified times. (2) In those countries in which the *contractor* fails to file patent applications within the times specified in (c) above; provided, however, that if the *contractor* has filed a patent application in a country after the times specified in (c) above, but prior to its receipt of the written request of the *Federal agency*, the *contractor* shall continue to retain title in that country. (3) In any country in which the *contractor* decides not to continue

the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

(e) Minimum Rights to Contractor and Protection of the Contractor Right to File

(1) The *contractor* will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the *contractor* fails to disclose the invention within the times specified in (c), above. The *contractor's* license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the *contractor* is a party and includes the right to grant sublicenses of the same scope to the extent the *contractor* was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the *Federal agency* except when transferred to the successor of that party of the *contractor's* business to which the invention pertains. (2) The *contractor's* domestic license may be revoked or modified by the funding *Federal agency* to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and *agency* licensing regulations (if any). This license will not be revoked in that field of use or the geographical areas in which the *contractor* has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of the *funding Federal agency* to the extent the *contractor*, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country. (3) Before revocation or modification of the license, the *funding Federal agency* will furnish the *contractor* a written notice of its intention to revoke or modify the license, and the *contractor* will be allowed thirty days (or such other time as may be authorized by the *funding Federal agency* for good cause shown by the *contractor*) after the notice to show cause why the license should not be revoked or modified. The *contractor* has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and *agency* regulations (if any) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of the license.

(f) Contractor Action to Protect the Government's Interest

(1) The *contractor* agrees to execute or to have executed and promptly deliver to the *Federal agency* all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the *contractor* elects to retain title, and (ii) convey title to the *Federal agency* when requested under paragraph (d) above and to enable the government to obtain patent protection throughout the world in that subject invention. (2) The *contractor* agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the *contractor* each subject invention made under *contract* in order that the *contractor* can comply with the disclosure provisions of paragraph (c), above, and to execute all papers necessary to file patent applications on subject inventions and to establish the government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required

by (c)(1), above. The *contractor* shall instruct such employees through employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars. (3) The *contractor* will notify the *Federal agency* of any decisions not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than thirty days before the expiration of the response period required by the relevant patent office. (4) The *contractor* agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement, "This invention was made with government support under (identify the *contract*) awarded by (identify the *Federal agency*). The government has certain rights in the invention."

(g) Subcontracts

(1) The *contractor* will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental or research work to be performed by a small business firm or domestic nonprofit organization. The subcontractor will retain all rights provided for the *contractor* in this clause, and the *contractor* will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions. (2) The *contractor* will include in all other subcontracts, regardless of tier, for experimental developmental or research work the patent rights clause required by (cite section of agency implementing regulations or FAR). (3) In the case of subcontracts, at any tier, when the prime award with the Federal agency was a contract (but not a grant or cooperative agreement), the *agency*, subcontractor, and the *contractor* agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and the Federal agency with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph (j) of this clause.

(h) Reporting on Utilization of Subject Inventions

The *Contractor* agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the *contractor* or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the contractor, and such other data and information as the *agency* may reasonably specify. The *contractor* also agrees to provide additional reports as may be requested by the *agency* in connection with any march-in proceeding undertaken by the *agency* in accordance with paragraph (j) of this clause. As required by 35 U.S.C. 202(c)(5), the *agency* agrees it will not disclose such information to persons outside the government without permission of the *contractor*.

(i) Preference for United States Industry

Notwithstanding any other provision of this clause, the *contractor* agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject inventions in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by the *Federal agency* upon a showing by the *contractor* or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

(j) March-in Rights

The *contractor* agrees that with respect to any subject invention in which it has acquired title, the *Federal agency* has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the *agency* to require the *contractor*, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the *contractor*, assignee, or exclusive licensee refuses such a request the *Federal agency* has the right to grant such a license itself if the *Federal agency* determines that: (1) Such action is necessary because the *contractor* or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use. (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the *contractor*, assignee or their licensees; (3) Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the *contractor*, assignee or licensees; or (4) Such action is necessary because the agreement required by paragraph (i) of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

(k) Special Provisions for Contracts with Nonprofit Organizations

If the *contractor* is a nonprofit organization, it agrees that: (1) Rights to a subject invention in the United States may not be assigned without the approval of the *Federal agency*, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the *contractor*; (2) The *contractor* will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10; (3) The balance of any royalties or income earned by the *contractor* with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions, will be utilized for the support of scientific research or education; and (4) It will make efforts that are reasonable under the circumstances to attract licensees of subject invention that are small business firms and that it will give a preference to a

small business firm when licensing a subject invention if the *contractor* determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided, that the *contractor* is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the *contractor*. However, the *contractor* agrees that the Secretary may review the *contractor's* licensing program and decisions regarding small business applicants, and the *contractor* will negotiate changes to its licensing policies, procedures, or practices with the Secretary when the Secretary's review discloses that the *contractor* could take reasonable steps to implement more effectively the requirements of this paragraph (k)(4).

(l) Communication

(Complete According to Instructions at 401.5(b))

(b) When the Department of Energy (DOE) determines to use alternative provisions under Sec. 401.3(a)(4), the standard clause at Sec. 401.14(a), of this section, shall be used with the following modifications unless a substitute clause is drafted by DOE: (1) The title of the clause shall be changed to read as follows: *Patent Rights to Nonprofit DOE Facility Operators* (2) Add an "(A)" after "(1)" in paragraph (c)(1) and add subparagraphs (B) and (C) to paragraph (c)(1) as follows:

(B) If the subject invention occurred under activities funded by the naval nuclear propulsion or weapons related programs of DOE, then the provisions of this subparagraph (c)(1)(B) will apply in lieu of paragraphs (c)(2) and (3). In such cases the contractor agrees to assign the government the entire right, title, and interest thereto throughout the world in and to the subject invention except to the extent that rights are retained by the contractor through a greater rights determination or under paragraph (e), below. The contractor, or an employee-inventor, with authorization of the contractor, may submit a request for greater rights at the time the invention is disclosed or within a reasonable time thereafter. DOE will process such a request in accordance with procedures at 37 CFR 401.15. Each determination of greater rights will be subject to paragraphs (h)-(k) of this clause and such additional conditions, if any, deemed to be appropriate by the *Department of Energy*. (C) At the time an invention is disclosed in accordance with (c)(1)(A) above, or within 90 days thereafter, the contractor will submit a written statement as to whether or not the invention occurred under a naval nuclear propulsion or weapons-related program of the *Department of Energy*. If this statement is not filed within this time, subparagraph (c)(1)(B) will apply in lieu of paragraphs (c)(2) and (3). The contractor statement will be deemed conclusive unless, within 60 days thereafter, the Contracting Officer disagrees in writing, in which case the determination of the Contracting Officer will be deemed conclusive unless the contractor files a claim under the Contract Disputes Act within 60 days after the Contracting Officer's determination. Pending resolution of the matter, the invention will be subject to subparagraph (c)(1)(B).

(3) Paragraph (k)(3) of the clause will be modified as prescribed at Sec. 401.5(g).



8484 Georgia Avenue • Suite 1000
Silver Spring, MD 20910
Phone 301.578.8500 • Fax 301.578.8572
www.cpwr.com