



*An Innovator's Guide to
Intellectual Property* »»

**Don't just make products.
Design experiences.**

An Innovator's Guide to Intellectual Property »

by Andrew J. DiMeo, Sr., Ph.D.

It is important to start by stating that I am not an Intellectual Property (IP) attorney and that this is by no means a qualified legal opinion, but rather the opinion of a former college professor who has sat in on approximately two dozen IP 101 lectures; it's the opinion of an inventor and the opinion of an entrepreneur.

If you are seeking professional legal advice, please don't hesitate to reach out. There are many good attorneys in town that I'm happy to refer you to (several of which have read and reviewed this guidebook prior to publication – Thank you!).

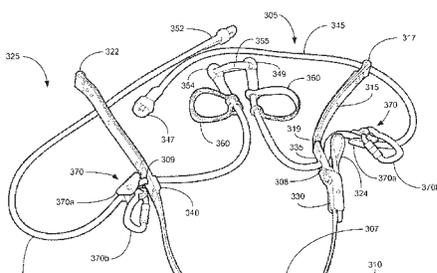
Why does IP law exist? What is the reason for it?

This is the question that I like to start with when discussing intellectual property. When posing this question to an audience of students and entrepreneurs, the most typical response I get is, “to protect my intellectual property.” The laws do indeed protect IP, however, that’s not why the law exists.

The fact of the matter is that governments around the world have established IP laws to “promote sharing.” More specifically, these laws have been established to incentivize innovation. This can be seen in the United States within the Constitution, which grants Congress the power “to promote the progress of science and useful arts.”

(54) **FALL ARREST SYSTEM**
 (51) **Int. CL**
 462B 35.09 (2006.01)
 (52) **US. CL.** 1829
 (57) **ABSTRACT**
 A fall arrest system adapted to prevent falls while climbing structures. A fall arrest system adapted to prevent linemen from falling from power poles during maintenance or repairs to various elements associated with the suspension and anchoring on transmission and/or distribution power grids. The system can comprise a safety belt type device comprising an inner strap assembly and an outer strap assembly for encircling a structure to be climbed. The system can comprise many materials in order to meet certain criteria, such as strength and/or stiffness. Additionally, the system can be easily manipulated as the user climbs up or down the structure to maintain the proper angle of the belt with respect to the user.
 (75) **Inventor:** Jesse Travis Watts, Brunswick, GA (US); Timothy J. Anthony, Conway, GA (US)
 Correspondence Address: TRISTAN SANDERS LLP 5200 BANK OF AMERICA PLAZA 600 PEACHTREE STREET, N.E., SUITE 5200 ATLANTA, GA 30308-2218 (US)
 (75) **Assignee:** The Southern Company, Atlanta, GA (US)
 (21) **App. No.:** 124576,600
 (22) **Filed:** Sep. 30, 2009
 Related US Application Data
 (60) Provisional application Nos. 61/401,754, filed on Oct. 1, 2008.

The “protection” of IP is **how** Congress executes its power, not **why**. The quote above goes on to say, “by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”



This is a trade, known as *quid pro quo*, which translates to “something for something” in Latin. The something traded by the inventor is the disclosure, or publication, aka sharing the “how to” of the intellectual property. The something traded in return by the government is a limited time exclusive right to what was shared.

Are there different kinds of intellectual property? What are they?

Sometimes, when we hear the term “Intellectual Property” and “IP” we jump to “Patent” as a first thought. Indeed, there are multiple forms of IP, including patents, trademarks, copyrights, and trade secrets. Let’s look at each, in reverse order, and then circle back to focus on Patents for the remainder of this guidebook.

Trade Secrets

That’s right; keeping something a secret is one form of IP. This is a different choice as the one discussed in the opening on why the laws exist. The laws exist to promote sharing, thus qualifying you for a trade of protection.

A trade secret is the choice not to share and therefore not receive the same protection. That being said, trade secrets are intellectual property and just like any property you own, if someone steals it, they can be punished. (Note that reverse-engineering is not stealing.) Whether reverse-engineered or stolen, once the property has been made public, it’s public, and not eligible for patent protection, nor trade secret protection, since it is no longer a secret. That’s the risk you take by not participating in the *quid pro quo*. The benefit is that your trade secret lasts forever (unless reverse engineered or stolen), while IP protection has limits of time.

Copyrights

Copyrights protect works of authorship including written works, songs, movies, and computer code as some examples.

Trademarks

Trademarks protect branding, such as names and logos.

Patents

Patents protect new, useful, and non-obvious things. As a matter of differentiation from a trade secret, the terms on a patent are roughly 20 years from filing an application.

All of these forms of IP: trade secrets, copyrights, trademarks, and patents, are “property.” I particularly like the use of the word “property” in IP. It helps me understand what it is, and what the exclusive rights are actually protecting. Again, the focus from this point forward is patents.

A white board is useful for this part in a classroom, so, imagine that I’m drawing a globe with some rough boundaries indicating some continents and oceans. Think about being a property owner in a land, like the United States, versus being a land owner of an island in the middle of nowhere. Both are property. Both are your land that you own.

Let’s recall the law: "To promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

I like to think of the **land** as your **exclusive rights**. On your land, you can exclude others. But, if your land sits on top of another land (like your land in the US), then, the other land owner can exclude you.

In patent law, this **exclusion** is realized in something called **Freedom to Operate (FTO)**.

On your sovereign island, you may be free to operate whatever you wish to operate (let your imagination run free). If you try to do the same thing on your property in the USA, you may not have such freedom to operate. The location of your land matters. You may be free to have a brush fire in rural areas, but not free to do so in city limits.

If you invented the lightbulb on a metaphorical island representing FTO, like Thomas Edison, then, you are free to make and sell light bulbs all day long. If you are an inventor of an energy efficient lightbulb (within 20 years of Edison), you are the owner of the energy efficient light bulb patent, but, you are not free to make and sell it, because you are sitting on Edison’s property (his intellectual property that is).

What Makes something patentable? Do I need a legal contract in place before I talk about my invention?

For something to be patentable, it must:

- (i) Fit into a category, AND
- (ii) Be eligible

(i) An invention must fit into the categories of process, machine, manufactured item, composition of matter, or an improvement to any item in the previous four categories. This is important because there are many creative innovations that are not patentable. For example, you can't patent a book or a song, but you can patent the display device upon which you view these items.

(ii) It's patent eligibility that I'd like to particularly dig into. For something to be patentable, it must meet three specific requirements: novel, useful, and non-obvious. Let's look at each.

Novel

I often interchange the word "novel" with "new." It means it's never been done before OR has never been publicly disclosed. Something that has been done before, and is publicly disclosed is called "prior art" and thus not eligible for patent protection.

A side bar on public disclosure:

Prior art means that it exists somewhere that the public can find it. A trade secret, for example, is a secret, and not available to the public. So, if you invent something that has been done before, but, no one knows about it, you can still get a patent (so long as it's also useful, non-obvious, and categorically eligible).

This is why non-disclosure agreements (NDAs) and confidentiality agreements are important. They are important to prevent inventions from becoming part of the public domain (and thus becoming prior art). They are less important (in my opinion) to act as anti-theft agreements. Larger corporations with legal resources in place make it common practice to put confidentiality clauses in their agreements primarily as a way to demonstrate that they have a standard business practice that avoids public disclosures.

In contrast to that, institutional investors such as venture capitalists (VCs), typically don't sign NDAs. Why not? They see so much stuff, they'd be reading agreements all day long and have no time left to review business plans. More seriously though, they tend to invest in similar technologies. After passing on one company and investing in another they like better, had an NDA been in place, the passed up company may feel like confidentiality protections were violated. VCs know IP law, and they know not to publicly disclose what they see. If you trust them, you can share your invention with them without an NDA in place and it doesn't count as a public disclosure. There is an expectation of confidentiality.

To me, this all comes down to trust. If you trust the person you are speaking to, and if they understand IP law, then you can have a confidential conversation with them without anyone needing to sign anything.

A company like Trig, and all service-based companies, have a reputation that depends on their clients being successful. Such firms are typically happy to sign an NDA to get the conversation started. That being said, if you trust the firm, you really don't need it to start the conversation.

The lesson here is this, as an inventor, you may be seeking advice. You may need a lot of advice and a lot of feedback from many trusted mentors in the community. Running around with an NDA for these people to sign is a way of saying, "I don't trust you." That's not a good way to ask for feedback and advice. It's better to say, in my opinion, "I understand you are a trusted advisor and I'd like to point out that what I'm discussing today is confidential." A handshake is all you need to keep the invention novel to meet the "novel" requirement.

Useful

Sure, it needs to benefit society. But, it doesn't take long doing patent searches to find a bunch of useless patents.

To me, useful means that it's been reduced to practice.

Here's the deal: an idea is not an invention and therefore not patentable. I can have an idea for a perpetual motion machine. But, if I have no idea how to make it; it's not useful. I have to know how to make it. Reduced to practice means that you know how to make it, but, you don't necessarily have to have made it.

I was an inventor on a patent that showed an endothermic chemical reaction of ammonium nitrate could be used to cool saline for therapeutic hypothermia. We didn't need to produce a commercial device to show its reduction to practice. All that was necessary was a thermodynamics equation on paper and/or a computer aided model with data to support our claims.

Useful is something that can be made. A proof of concept that demonstrates its feasibility will suffice as a reduction to practice to meet this requirement.

Here are a few scenarios to consider:

If I have an idea and know how to make it, but I do nothing about it other than tell you. Then you work painstakingly for months building the proof of concept but do not add additional features beyond my concept, I'm the only inventor.

If I have an idea and have no clue how to make it, and all I do is tell you my idea. Then you work for months in a lab reducing it to practice, and eventually build a proof of concept. In this case, you are the only inventor.

If I have an idea and some of the know-how to make it, but not all the know-how, and I share that with you. Then you contribute additional know-how to build it in the lab, then we are both inventors.

Another arrangement to consider is “work-for-hire” (or technically “hired to invent”). This is where the inventor hires a person or company to reduce the creative idea to practice. In this instance, the reduction to practice is at the behest of the individual who had the creative idea. That person is the inventor, the other person is considered an employee or contractor.

Is It "First to File"? (Spoiler Alert: No.)

No. It's not “first to file.” This matters! It seems to be fairly well known by people that I talk to about patent law that the US not too many years ago changed its patent policy to match the rest of the world (except for one major difference that still persists – more on that below). The US used to be “First to Invent,” unlike the rest of the world. Now we have the same policy. That policy is NOT “First to File.”

It is “First INVENTOR to File.”

Here's why this is important. We just learned about who are inventors and who are not inventors. If you are an inventor, but you haven't filed yet, and you share your invention with me, and then I go and file for a patent before you do, then I'm the first THIEF to file. When you file, you'll be the first inventor to file. If/when there's a legal dispute over the two filings, if you have a lab or engineering notebook and other hard evidence that proves the date of your invention, and a documented date of that conversation with me, you can prove that I am a thief (in something called a derivation proceeding), and that the invention should be credited to you.

Remember the NDA above. You don't need it when you are talking to someone you trust. If that person betrays your trust, you still have a legal position without having that NDA in place.

Now, about that major difference that still exists in the US compared to rest of the world? A 12-month safe harbor. Recall that patentability is tied to public disclosure. In the US, you have 12-months after public disclosure to file a patent. What this means is that a public disclosure will immediately put your invention into the public domain for the rest of the world, voiding it from patent protection. Whereas, in the USA, there's a 12-month safety net, only after which your invention becomes public domain if not patented.

Is a presentation a public disclosure?

First, let's remind ourselves why public disclosure is important. Making the invention available to the public puts it into the prior art, and therefore voids it from being patentable (see the "Novel" section above).

So, is a presentation considered a public disclosure? Well, it depends. The answer is, "yes, it is a public disclosure," if the presentation is being made to the public and includes how the idea was reduced to practice. However, let's say you are making a presentation in a closed boardroom to a group of potential investors. Even if no NDA has been signed, so long everyone in the room agrees to keep the presentation confidential, then the answer is, "No. the presentation is not a public disclosure."

Here's a few tips to ensuring a presentation is not considered a public disclosure in the absence of a signed confidentiality agreement:

- Mark the presentation slides with "Confidential and Privileged"
- Make a verbal statement at the beginning of the presentation that it is confidential and privileged, and give people a chance to leave the room if they are not willing to maintain confidentiality
- Have a sign in sheet for who actually is in the room
- Don't provide leave-behind materials such as handouts that contain confidential information
- Most importantly, know the room
 - A boardroom with professionals that understand the importance of nondisclosure is, in my opinion, a pretty safe place to give a presentation marked confidential without anyone signing anything, not even a sign-in sheet
 - A large audience where you don't know everyone in the room, that's likely going to be a public disclosure

What if I'm an academic researcher, student, or otherwise in a position where I have to give a public presentation but I want to keep my invention from becoming prior art?

My advice for giving a public presentation and not disclosing your invention is to discuss only the “what” of the invention, but not the “how.” Recall the section above on “Useful” and the concept of “reduction to practice.” So long as you stick to the ideas (the what), and you are not teaching the reduction to practice (the how), then you are not publicly disclosing the invention.

Things that clearly are public disclosures include any public materials that teach reduction to practice. These would include public presentations, posters, abstracts (presented or published), manuscripts for peer-reviewed journals, books, blog posts, etc.

What is Know-How and what does that have to do with IP?

Know-How is the term used in the legal lexicon of intellectual property for practical knowledge, expertise, and other such skills. Know-how covers all of the details and conditions that may exist in intellectual property, but that may not be explicitly part of a patent (and therefore may be considered a trade secret).

At the end of the day, if you and/or your team are the technical experts with the know-how, and have extraordinary skill in the art, coming up with something novel, useful, and non-obvious, you have the makings for an intellectual property strategy that may include a mix of trade-secrets, patents, copyrights, and trademarks. My advice to you is to seek advice and buy a patent attorney lunch.



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