



## What Are the Different Types of Patents?

Different types of patent applications exist so that inventors can protect different kinds of inventions. Savvy inventors can utilize the different kinds of patent applications to secure the rights they need to protect their inventions.

There are four different patent types:

- **Utility patent.** This is what most people think of when they think about a patent. It's a long, technical document that teaches the public how to use a new machine, process, or system. The kinds of inventions protected by utility patents are defined by Congress. New technologies like genetic engineering and internet-delivered software are challenging the boundaries of what kinds of inventions can receive utility patent protection.
- **Provisional patent.** United States law allows inventors to file a less formal document that proves the inventor was in possession of the invention and had adequately figured out how to make the invention work. Once that is on file, the invention is patent pending. If, however, the inventor fails to file a formal utility patent within a year from filing the provisional patent, he or she will lose this filing date. Any public

disclosures made relying on that provisional patent application will now count as public disclosures to the United States Patent and Trademark Office (USPTO).

- **Design patent.** This patent offer protection for an ornamental design on a useful item. The shape of a bottle or the design of a shoe, for example, can be protected by a design patent. The document itself is almost entirely made of pictures or drawings of the design on the useful item. Design patents are notoriously difficult to search simply because there are very few words used in a design patent. In recent years, software companies have used design patents to protect elements of user interfaces and even the shape of touchscreen devices.
- **Plant patent.** Just what it sounds like, a plant patent protects new kinds of plants produced by cuttings or other nonsexual means. Plant patents generally do not cover genetically modified organisms and focus more on conventional horticulture.

## What Is a Provisional Patent?

A provisional patent affords inventors an extra year of time in order to decide if and how to file a utility patent. That's just one example of how an inventor can use multiple patent filings to mitigate risk, hedge a bet, or expand patent protection.

Say you are hard at work beating eggs with a whisk when you realize that if you curve the tines and flatten them slightly you could produce delicious scrambled eggs in half the time.

You 3D print a prototype and, in addition to its working beautifully, you realize the reshaped tines produce a very distinctive look.

As you apply for a patent, consider all the ways to protect your new device.

***You can file a design patent to protect the distinctive look of your improved egg beater. You can file a utility patent to protect the machine itself and the way it works. You can even file a provisional patent application to give yourself more time to file your utility application.***

The different types of applications exist to give inventors options. You may have three design concepts for your egg beater that you initially test. They all work about as well, so you include drawings and a description of each in a provisional patent application.

A few months into your testing, you discover one design is not durable—breaking after a few uses. While talking with potential licensees, you discover that another design is difficult to manufacture due to the tine geometry.

The egg beater would cost more to produce than anyone would pay for a kitchen gadget. As you start to write your utility patent, you will know what design to emphasize and where to focus your patent strategy.

Your egg beater provisional patent gives you a year to learn more about the device and the possible market for your patent.

As you weigh your options, keep in mind that filing a patent has consequences. The USPTO publishes utility patent applications a few months after they are filed. At that point, your application is prior art against all future inventions. Be sure to file patents strategically to avoid tripping over your own inventions.

# **The Point Is to Protect Your Invention**

If you are going to go to the effort to write a patent application, make sure you fully consider every kind of protection available. United States law offers four different kinds of patent applications. Use them to get the right protection for your budget and as part of your broader strategy to get a return on your investment.

## **Provisional vs. Non-Provisional Patent Application: What is the Difference?**

Did you know you can file a provisional patent application to help you get more time to complete the patent process? Learn more about provisional patents, used to 'reserve' a spot in line for your patent application.

The dog just won't leave you alone during dinner. Exasperated, you place the heel of your sandwich into an old plastic jar and let her push it around the floor. Watching her slide it around the kitchen floor - it hits you: your eureka moment!

A good invention is rare. That flash of genius is fleeting so be ready to protect it when it comes. Lesson one: the difference between provisional patent and nonprovisional patent. Filing a provisional patent application gives inventors flexibility to quickly protect an invention. The provisional patent application is just the beginning and you will need a non-provisional patent to protect your flash of genius.

Knowing the difference between a provisional patent application and a non-provisional patent application will help you learn more about the process of filing a patent, the expected costs of protecting your invention and how to use both provisional and non-provisional patent applications to protect your rights in a smart way.

For example, as you watch your dog try to chew the side of the plastic jar you realize that if the jar had holes of just the right size it would be just right: big enough for her to taste the sandwich but small enough to stop her from snatching it. How do you know what size those holes should be? You sit down and sketch out some holes and slits and go to work testing which one works best.

### **What is a Provisional Patent?**

In the United States, inventors can file provisional patent applications. A provisional patent application will never get a patent issued for your dog toy. It only lasts for one year and gives the inventor an opportunity to conduct more research or finish the invention before filing a non-provisional patent application. A provisional patent application also costs a lot less to file.

For your dog toy, you can spend that year testing slits and holes of different sizes to figure out which ones work best for which dogs. The provisional patent application form is very loose. Filing a provisional patent has very few formalities. You can sketch out the jar, describe different kinds of jars that would work for your invention, and include as many variations on holes, slits or any combination of the two.

From the day you file, you will have a year to convert your provisional application. Conversion involves filing a non-provisional patent application that includes a reference to your provisional patent application. In that way, a good

provisional patent definition is a placeholder. It holds a place in line for your future non-provisional application.

Be careful. If you find a design for a slit or a hole that was not included in your provisional patent application and add it to the non-provisional application then you may lose the benefit of the provisional application. The provisional only holds the line for the invention as you described it in your provisional application. Anything new that goes into your non-provisional application will have to go to the back of the line.

The result will be hybrid patent: some parts will be invented the day of the provisional filing, others the day of the non-provisional filing. The provisional patent application needs to anticipate as many different ways of practicing your invention as possible in order to give you the flexibility you need to write a good non-provisional patent.

### **What is a Non-Provisional Patent?**

If a provisional patent application is simple, informal and quick to file then a non-provisional patent is the opposite: long, complicated and difficult to file. The non-provisional application form is very long. It contains many parts and the parts have many rules. A good non-provisional patent definition is a formal dinner: it is long, has many parts, lots of fussy rules and you will get in trouble if you break just one.

Unlike the formal dinner, all the non-provisional application is worth the hassle. Unlike a provisional patent application, a non-provisional patent can issue into an enforceable claim. Your dog toy with the specific pattern of slits and holes is only protected once your non-provisional patent is issued by the United States Patent and Trademark Office (USPTO). Then, if anyone makes a toy with the same pattern, they are infringing your patent.

## **Which one Should You File?**

File both. For example, you have a good idea of the range of possible hole and slit patterns that will work for your dog toy. If you include them all in the provisional application then you have a year to test as many as possible. You can start to make drawings for your non-provisional application based on the patterns that keep the dog occupied.

You can also use that time to find a partner to produce your toy. You can show the toy around at the dog park and see if other dogs like the same patterns. You can email it to the business development office at pet toy manufacturers. You have a year to work on your patent, finding out:

- Does your invention work?
- Does anyone want to make the products it protects?
- Is it worth the expense and hassle of a non-provisional patent application?

Provisional and non-provisional patents are very different tools. When used together, they are a great way to make the most of your invention and get the most valuable patent possible.

\*\*\*\*\*

## **The Utility Patent: What Is It and What Does It Protect?**

Utility patents are among the valuable assets in the world. Unlike other forms of intellectual property protection, they have numerous formal requirements and can be very expensive to get. For new inventors, pursuing a utility patent can be

daunting. If, however, you take it one step at a time, you too can receive an issued patent for your invention.

When most people talk about patents, they are talking about utility patents. What is a utility patent? A good utility patent definition is "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof," which is how the **U.S. Code** defines an invention for which a patent may be obtained.

Utility patent applications seek to protect new machines, systems, and other useful inventions. A utility patent is among the most valuable forms of intellectual property, but it comes at a price. The utility **patent cost** can be enormous. Utility patents for simple inventions can cost a few thousand, with complex technologies costing tens of thousands.

### **How to Get a Utility Patent**

As you begin to describe your invention, break it down into a series of essential and nonessential parts. For example, your new mechanism to drive a 10-speed bicycle may contain most of the parts of a standard bicycle: the gears, the chain, and the pedals. However, it also contains a new design for a tensioner that is inspired from a chainsaw.

Conduct a utility patent search to see if anyone has ever patented or published a similar design. You will readily find most of the elements of a standard bicycle. The trick will be to find a bicycle that uses your new, chainsaw-inspired tensioner as well.

A patent search is critical before you file your patent. If you find a patent that uses the same tensioner, then you are going to have hard time getting a patent. It is better to find out before you go through the cost of filing a utility patent application than afterwards.



## **Filing a Utility Patent**

Patents are teaching documents. The government grants inventors rights in their inventions so that inventors will tell the public how to use their inventions. A utility patent application has several formal requirements. It contains multiple sections, each with its own rules for formatting. It requires drawings or diagrams to explain how your invention works. These requirements help ensure the public learns how to use your invention.

This teaching requirement is well illustrated by the difference between utility and design patents:

- Design patents require only a drawing(s) of the design and limited text.
- Utility patents require a thorough explanation of how the invention works. The inventor should discuss alternative ways to make the invention and provide enough detail so that another person in the same technical field could readily reproduce the results.

In looking at a utility patent vs. design patent, it is clear how much more work goes into a utility patent.

## **Staking Your Claims**

Inventors file patents to get issued claims. In return for teaching the public how to use the invention, the patent office issues the inventor the right to stop others from making, using, or selling the inventor's invention. Utility patents contain a series of numbered sentences that claim the invention. If another person makes, uses, or sells the exact thing described in a patent claim, then that person is infringing the inventor's patent.

The claims recite the essential elements of the invention. The patent examiner will argue with the inventor that the combination of elements in the patent claim must be both novel and non-obvious. Returning to the bicycle utility patent

example, your bike chain invention will recite all the parts of a chain, the gears, and your chainsaw-inspired tensioner.

- Your invention is novel if all of these elements do not appear in any one published reference. To reject your invention as not novel, the examiner will have to find a patent, patent application, or other publication that includes all the elements of your invention: the bicycle, the chain, the gears, and the chainsaw tensioner.
- Your invention is non-obvious if all of these elements do not appear in any set of published references. This means that if the examiner finds half of the elements in one reference and half of the elements in another reference, then he can combine the two references and reject your invention.

For example, the examiner may not find a bicycle with your chainsaw-inspired tensioner, but he can find the tensioner on a chainsaw. The examiner can combine a bicycle patent along with a patent application for a new chainsaw—that includes the same tensioner—to reject your invention as obvious.

Unlike a rejection based on novelty, you can argue that no one would ever think to combine a chainsaw and a bicycle or that combining the two produces results no one would have anticipated.

## **Working around Rejection**

For a rejection based in novelty or obviousness, you can always amend your claims to get around the rejection.

For example, mounting the chainsaw tensioner onto a bicycle might require a particular kind of bracket. If you include the bracket in your claims, and if that bracket is not in the chainsaw patent or the bicycle patent, then you may get

around the rejection. Just remember, the more things you put into your claims, the easier it will be for a competitor to get around your patent.

Utility patents are among some of the most valuable assets in the world. They give inventors the exclusive commercial rights to the latest technology, in exchange for which they also are difficult to write, expensive to get, and complicated to understand.

## How do you know if a patent already exists?

Your invention has to bring something new and unique to the table, or it can't get a patent. The patent process begins by searching for similar patents. Find out more about how to see if someone has patented your idea.

You have a great idea - a product that will change everything. You think: "I need to **patent my idea**". The first step towards **patenting an idea** is a **patent search**. Before you get too far into the **patent process**, it is critical to know what other patents are out there. A patent search is essential to determine how difficult it will be to get the patent you need.

### Searching is Easier than Ever

To **search patents** you need a patent database. Not too long ago, your search had to happen at the patent office. Now, the United States Patent and Trademark Office makes its entire database of patents available for **patents search**. Services like Google also index patents. Through the internet, inventors have access to resources, especially for a **U.S. Patent search**, to **search for patents** that were unimagined before.

It is easier now to search patents than ever before. Before you start **patent an idea** you need to know more than did someone else **patent your idea**? You

can repeat multiple **patent searches**, using a variety of key words. **Search patent** databases as soon as possible so that you can find out quickly if someone has already patented your invention. That way you can change direction or invent something else.

## **Know What You are Looking For**

To conduct a patent search you have to know what makes your invention novel? That means, what is it that makes your product, service or system new and different?

The next step is to break down those new features into search logic. Let's say your product is a new key ring that makes it easier to clasp your keys to the side of the purse. The novel parts are the spring-loaded clasp that allows the user to clip it to the side of a purse with one hand.

To search for your invention, reconstruct those elements: keychain, purse, spring and clasp. Next expand on your search phrases with any possible synonyms that you can think of: (keychain OR key ring) AND (purse OR handbag). Keep refining your search to get the number of hits down to something manageable. Keep track of your search logic. Write it down and know how many hits each search resulted in.

The patent office receives more patent applications now than at any other time in history. You will want to repeat your search periodically to make sure that there are not any new patents that are close to your invention. Keeping your search logic makes sure you can easily repeat your search.

## **Near Misses and Direct Hits**

You finish your search and find no one else has patented your invention. You do, however, some other patents. Someone invented a similar spring-loaded

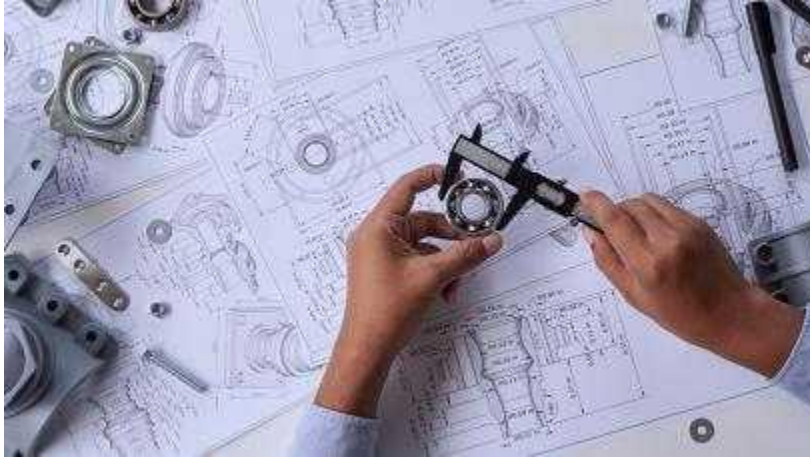
clasp for the back of a stroller. It is different, with a bigger spring and different shaped clasp but it shares many similarities.

Even if someone has not patented your invention, your search is very important. Patents require absolute novelty. No one can ever have patented the same invention. Patents also cannot be obvious, this means, in legal terms, that a reasonable expert in the field could not have simply figured out how to create the invention. Looking at the stroller clasp, the patent office could argue that your purse clasp is an obvious modification of the stroller clasp – maybe the only real difference is the size.

When you write your patent it is best to include details that make it easier to argue that your purse clasp is not obvious: perhaps the small size of the spring requires special materials or the shape of the clasp has to include a specific angle. Either way, it is better to know about the stroller invention ahead of time, to reference it in your patent and include details that differentiate it over the stroller clasp.

Even if you are filing a **provisional patent** - conduct a patent search. Even if no one has patented your invention it is important to know what else is out there.

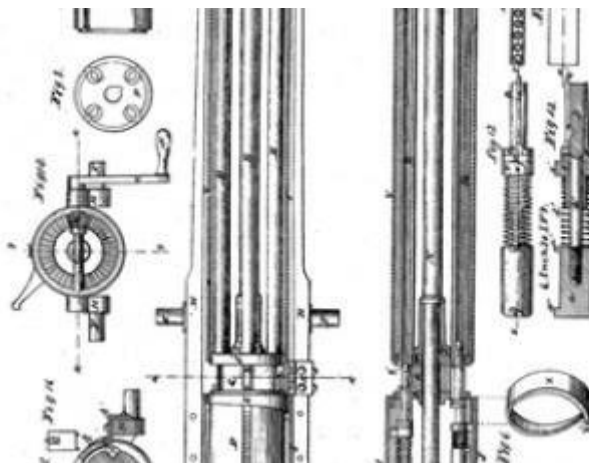
# How to Get Patent Drawings



Draw them yourself or hire a professional: getting the best patent drawings requires a bit of both. Before a draftsman pens the straight lines and neat numbering, your drawings have to explain your invention in a way you understand. Find out more about how to get great patent drawings.

The U.S. Patent Office grants inventors rights to their inventions to teach the public about their inventions. A patent is a document that teaches the public how to use the invention. Patent drawings are often the most important tool with which inventors teach. When you apply for a patent, get the drawings right, and you have taken one of the biggest steps towards getting the patent right.

## What are Patent Drawings?



Patent illustrations are how inventors communicate the parts of a machine, the steps in a process, or a molecule's structure to the public. The final drawings in your patent need to conform to the rules set forth by the U.S. Patent Office. Those complex rules make it difficult to know if you should make your own drawings or have a professional do them for you. Even if you decide to have a professional make your patent drawings, it will always help if you start by drafting your own.

For example, you invented a complex process of iterative data encryption. The method constantly adjusts the encryption on a file based on a variety of parameters. Although it seems that your process does not lend itself to drawings, the drawings in your patent will be critical.

U.S. patents that teach methods or processes routinely employ flowcharts or box diagrams to show the steps of the process in order and variations in that process.

## Do It Yourself Patent Drawings

One of the best things that you can do is make your own simple drawings such as flowcharts. Make one for every distinct encryption process and make a different flowchart for every variation on the process. When you put all the flowcharts in order, you have the overall patent design: what are the steps of the process, and what are the possible variations?

Each patent illustration is part of an outline for the rest of the patent application. How you draw the drawings and what you have in them is a critical strategic element of the patent application. If you hire a patent lawyer to write your patent, you will have to make the decisions about your drawings together.

***It will help the lawyer enormously to have your encryption process with all its steps and variations, before writing your patent.***

As you start to consider the best way to go about patenting an idea, your drawings are an opportunity to explore what the invention is. Draw all your flow charts on a whiteboard so that it is easy to erase and change it. Take a photo of it when you are finished and move on to the next one. When you are finished, you will not be trying to just patent an idea but have a complete invention.

## **Professional Patent Drawings**

Patent drawings have a number of formalities. They must be sufficiently clear, with clear printing, and within exact margins of a certain size. Your encryption process flowcharts are no different. If the margins are wrong, the USPTO will require you to amend the patent application and correct the drawings. If you do not amend your patent application, you may lose your patent - forever.

Do not worry about the rules on how to draw a patent. Focus on getting the technical details of your invention across. Even if you do decide to make your own drawings, it will be much easier to worry about the exact rules of the patent drawings after you have a solid draft completed.

Whether you are filing a design patent, a utility patent, or even a **provisional patent application**, take the time to get the drawings right. Make sure the drawings emphasize the key parts of your invention.



Once your drawings clearly convey your invention, then you can decide if you want to take them to a professional. If you hired a lawyer to write your patent, they might have a drafter they can recommend. If you are writing your own patent, then you may want to find a professional patent illustrator.

For design patents and utility patents, you have to make sure they comply with all relevant rules and regulations required by the United States Patent and Trademark Office.

\*\*\*\*\*

## How to Do a Patent Search Online

Your great invention is not enough to get a patent. You need to conduct a patent search to find out if your invention is really new. The Internet gives inventors access to better search tools than ever. Use these tips to get the most out of your searches..

You cannot patent something unless it is completely new. To find out if your idea is new you have to conduct a patent search. Learning how to do a patent search is a critical skill for any inventor. Patent searching reveals the limits on the patent you can get for your invention: the prior art.

Prior art is the sum total of all published papers, patents and patent applications available to the public. The United States government grants your patent in return for the public disclosure of your invention. If your invention is not something totally new then why give you the patent? If the prior art contains your invention then there is nothing new to teach and no benefit to the public.

Fortunately, you have a wide array of **patent search services** available to you. The Internet has given inventors enormous power to conduct professional

patent searches. Instead of going to the library or to the patent office, you can conduct your patent search online. There are even professional services that can search patents for you. Here's how you can use those online tools to conduct the best search possible patent search.

## **Keep Searching**

Inventing is difficult. Your brand new idea is likely not as new as you think. To find out, start searching as soon as you have the earliest version of your invention. Keep searching as you improvement and search some more after you file your patent. If your new invention is already in the prior art then, it is better to find out early. It is a terrible feeling to devote a year of your life to an invention only to find out that it is not novel. With easy-to-use online tools, it is easier than ever to find prior art.

In reality, the results of a patent search are seldom black and white. You will likely find out that several aspects of your invention are already patented or published while some parts of your invention are not. Use the search to inform the process of invention. Early searching allows you to focus on the aspects of your invention most unlike the prior art.

For example, you invent a new way to brew beer. The process takes the same steps that are used in a traditional beer brewing methods but rearranges them. The method also adds a brand new step at the end. When you conduct your search, you find that several other fermentation processes use your new step but no one seems to have ever rearranged the other steps like you have. You then come up with three or four other ways to rearrange the traditional steps of brewing to expand upon the newest part of your invention.

## **Save Your Search Results and Search Logic**

When you file your patent, you will be able to list the patents and other publications that you consider most relevant. This document is called an information disclosure statement (IDS). It seems counterintuitive, but a long IDS makes a patent stronger. It means that when the patent is finally granted by the patent office, your patent is completely new when compared to all the patents and publications that you found in your search.

You have to disclose any patent or publication that you, as an inventor, think is relevant to the novelty of your invention. If you fail to do so, your issued patent can be rendered null and void. You want to disclose lots of references and not rely solely on the USPTO patent search. Even though a long IDS will make it harder to get an issued patent, the issued patent will be stronger for having been considered in light of all those references.

Do not just save your references. Save your search logic as well. You need to repeat your searches both before and after you file your patent. For example, you come up with an invention in the spring and start to do some patent searching. By the time you finish your search and write a **provisional patent application**, it's June 1st.

Yet, unbeknownst to you, another inventor filed a nearly identical patent application on May 1st. That patent application may not be published until November 1st of next year. That means that you need to repeat your patent searches for a year and a half after your first filing date to include all the prior art.

### **What Happens if You're Blocked by Prior Art**

Finding a conflict with prior art could be a good reason to abandon your patent application. When you find a prior art reference that seems like it may block your patent application, analyze it carefully. Is there any aspect of your invention that the prior art did not consider? Is there any way that you are different?

If not, let the application go. It is hard enough to get a patent for a novel idea. It is nearly impossible to get around difficult prior art.

If you find a reference to prior art early, it is easy to accept the results: save your time and money, and do not file the patent application. When you find the prior art later in the process, things get complicated. If you find the prior art after you file the patent application, for example, then you need to include it in your IDS.

If you've gotten so far into the process that you've filed the patent application, but want to back out due to conflicting prior art, then you can give the USPTO notice that you want to abandon the application and pay a fee. You also can simply stop responding the USPTO and your application will eventually become officially abandoned.

Inventors are better able to search for prior art now than ever before. A good patent search will make your patents smarter, better and stronger. Start your patent search early and keep searching. Save the prior art you find and be sure to disclose it in your IDS. Your work will be rewarded. The patents you file will be more likely to succeed and the patents that issue will be more valuable.

<https://www.youtube.com/watch?v=0SS0B9IY30s&feature=youtu.be>

<https://patentinindia.com/cost-patent-registration-india/#:~:text=You%20need%20to%20pay%20fees,on%20expiry%20of%2018%20months.>