



**PDHonline Course G162 (2 PDH)**

---

# **Introduction to The U.S. Patent System**

*Instructor: Danny R. Graves, PE, MSEE*

**2020**

**PDH Online | PDH Center**

5272 Meadow Estates Drive  
Fairfax, VA 22030-6658  
Phone: 703-988-0088  
[www.PDHonline.com](http://www.PDHonline.com)

An Approved Continuing Education Provider

# Introduction to The U.S. Patent System

*Danny R. Graves, MSEE, PE, Registered U.S. Patent Agent*

## Course Content

### **Introduction**

A patent is a grant, made by a specific government, that gives an inventor the exclusive right to make, use, and sell that invention for a certain period of time. A patent is a piece of property that can be sold, licensed, assigned, etc. to another entity although the inventor listed on the patent never changes.

If the invention is valuable, a patent can be a crucial defensive or offensive business tool. Many industrialized countries have some form of patent process and inventions are often patented in more than one country. In fact, many countries adhere to the Patent Cooperation Treaty (PCT), enacted in 1978, which facilitates a more streamlined process for filing a patent application in more than one country.

The U.S. has a “first to invent” policy meaning that the first person to invent something has the right to get the patent for the invention. Most of the rest of the world has a “first to file” policy which means that the first person to file a patent application for an invention has the right to get a patent on it even if they were not the first to invent it. The “first to invent” policy seems more fair but it is harder to manage than the “first to file” policy. It is easier for a government to verify who filed an application first as opposed to who invented something first. While world wide patent protection is a very important topic, this course is only concerned with introducing the student to the U.S. patent system.

### **Where do you get a U.S. patent?**

The United States Patent and Trademark Office (USPTO) is in charge of issuing patents in the United States. The USPTO has been around for over 200 years. They are headquartered in Alexandria, Virginia. Their Web site, [www.uspto.gov](http://www.uspto.gov), is a wealth of information including the ability to electronically search patents and pending patent applications. In addition, the Manual of Patent Examining Procedure (MPEP) is available on the USPTO Web site. The MPEP is a huge document, with many chapters, that has the answer to just about every question you could have about completing a patent application. The trick is being able to ferret out the specific data you need in the massive amount of information. Having the MPEP on computer so that you can use the “find” feature of a word processor or Acrobat Reader is very handy.

The USPTO Web site also contains United States Code (USC) Title 35 which contains the patent laws. In addition, the USPTO Web site contains the Code of Federal Regulations (CFR) Title 37 which contains the patent rules. These two documents, along

with the MPEP, will tell you everything you ever wanted to know (and more) about patents. Of the three documents, the MPEP is the most practical since it sort of sums up the contents of the 35 USC and 37 CFR. Of course, if there is any disagreement, the *law* takes precedence over the MPEP.

The USPTO Web site front page is shown in Figure 1.



Figure 1. The USPTO Web site.

## Types of U.S. Patents

What type of invention do you need to protect? Is it a unique shape for a cell phone, a better mousetrap, or a new variety of petunia? There are three types of U.S. patents to choose from: design, utility, and plant.

### Design Patents

Design patents protect the way a product *looks* but not the way it functions. MPEP Chapter 1500 defines the *design* of an article as the visual characteristics embodied in or applied to an article. It is **not** the article itself that is the subject of a design patent but instead the ornamental design. A unique shape for a cell phone or a novel computer icon

would qualify for a design patent. Design patents are less expensive to get and maintain than a utility patent. Generally, they are also easier to get approved or “allowed” by the USPTO. Design patents expire 14 years from the date of grant of the patent.

### Utility Patents

Utility patents are typically what people think of when they hear the term “patent.” A utility patent protects the way an article is used and works. A utility patent is the most difficult to get approved and costs the most money to obtain and maintain. If you designed a mousetrap that works better, you would need to get a utility patent (note that if you wanted to also protect the way your mousetrap looks, you could get a design patent in addition to the utility patent). Utility patents require well-written claims (defined in the next section) in order to be effectively used as an offensive weapon (sue others for infringing) in the future. The specification must also be well written, *fully* describing the invention, in order to be used defensively (keep others from patenting the idea). Currently, utility patents will expire 20 years after the filing date of the application.

If the inventor needs to get a utility invention “on file” at the USPTO as quickly as possible or they don’t have the time or resources to file a regular “nonprovisional” utility patent application, they can file a “provisional” patent application. They can refer to the date of filing this provisional application if they need it to show they invented it first. The provisional application does not require all the parts of a regular nonprovisional utility patent application so it is cheaper and easier to file. A regular nonprovisional utility patent application must be filed within one year of the filing date of the provisional application or the ability to use the provisional application’s date will be lost. Provisional applications do not work for design patents.

### Plant Patents

Concerning plant patents, MPEP Chapter 1600 states “Whoever invents or discovers and asexually reproduces any distinct and new variety of plant, including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, may obtain a patent therefore, subject to the conditions and requirements of this title. The provisions of this title relating to patents for inventions shall apply to patents for plants, except as otherwise provided. In the case of a plant patent, the grant shall include the right to exclude others from asexually reproducing the plant, and from using, offering for sale, or selling the plant so reproduced, or any of its parts, throughout the United States, or from importing the plant so reproduced, or any parts thereof, into the United States.”

With a plant patent, it is essential that the plant was *asexually* reproduced. Currently, a plant patent will expire 20 years after the filing date of the application. Note that a utility patent could also be obtained for some plants although it is usually more difficult to obtain than a plant patent.

## **Parts of a utility patent application**

MPEP Chapter 600 defines the parts, form, and content of a utility patent application. The main parts of the utility patent application are the specification, oath/declaration, drawings, and filing fee. The appropriate transmittal forms must also accompany the application. Figure 2 shows an example of the first page of a utility patent showing the inventor information, title, abstract, etc.

The specification is where the invention is completely described in a manner which would enable a person, skilled in the subject, to make the invention. The specification also includes the *claims* of the patent. A claim is a statement, of specified construction, that points out a specific, special feature(s) that you want patented. The claims portion of the specification usually begins with “We claim:” or a similar statement. Figure 3 shows the claims section of an issued utility patent. The feature that is claimed must be adequately described elsewhere in the specification. A utility patent application may have more than one claim. In fact, utility patents usually contain many claims and there are some issued patents literally containing hundreds of claims. If there are more than three independent claims (claims that don’t reference another claim), there is an additional fee. If a claim references more than one other claim, it is termed a multiple dependent claim and there is an additional fee. For any type of claims in excess of twenty, there is an additional fee. You get the point...fees, fees, fees! These are in addition to the basic filing fee which you must include with the application.

If drawings are necessary to understand the invention they must be included with the patent application. The drawings initially submitted with the patent application need not be formal. The formal drawings can be submitted later. MPEP Chapter 600 details the drawing requirements. You can’t just submit the drawings from your engineering department. There are requirements for things such as margins, fonts, shading methods, line widths, etc. NOLO press’s book *How To Make Patent Drawings Yourself* is a great reference for making patent drawings.

Photographs can also be included but most of the time because of difficulties such as adding reference numbers/other graphics as well as the difficulty in reproducing photographs as compared with properly prepared drawings.

An oath or declaration is where the inventors lists their full name, citizenship, address, etc and signs to certify the information. The oath or declaration must identify the application to which it is directed.

## **Parts of a design patent application**

MPEP Chapter 1500 defines the required contents and order of a design patent application. A design patent essentially has the same elements as a utility patent application.

Good quality drawings or photographs are obviously an essential, important part of a design patent application. There is an art to how much you show in design patent drawings. If you get too detailed, it is easy for competitors to design around it. Not enough detail and you may not fully claim your invention or it may not be allowed by the examiner (the USPTO employee that determines whether or not you get a patent). This is a tricky balancing act.

A design patent application is required to have only *one* claim which is directed at the ornamental design of the article. It is the *drawings* that are extremely important in a design patent.

### **Parts of a plant patent application**

MPEP Chapter 1600 details the required content and order of a plant patent application. A plant patent application is required to have the appropriate transmittal forms along with the specification, drawings, oath/declaration, and appropriate fees. Like a design patent, more than one claim is not permitted in a plant patent. It is common for plant patents to contain photographs instead of drawings.

### **Is the invention patentable?**

In order to get your patent allowed, you must convince the patent examiner that your invention fulfills the requirements of patentability as described in MPEP Chapter 2100. In order to be patentable, the invention must be useful, non-obvious, and novel.

#### Useful

Usefulness is fairly easy to establish. Something can be useful for a variety of reasons including the fact that it provides amusement to the user. If a use has not been established for your invention, your patent may get rejected. Also, if the use is illegal, you are out of luck as far as getting a patent.

#### Non-obvious

Non-obviousness is a little tricky to establish. The standard for measurement of non-obviousness is that a person working in the field of the invention must find the invention unexpected and surprising rather than apparent and expected. There is a lot of room for opinion when it comes to an invention being non-obvious. Items that seem obvious today (paper clip, safety pin, ironing board, etc) were not obvious when they were invented.

#### Novel

In order for your invention to be novel, it must differ from the status quo in the field of your work. The existing subject matter in the area of your invention is termed “prior art.” If the invention is already patented or described in a printed publication, you can forget getting a patent. A thorough search for prior art, before filing the application, is very

important to keep the inventor from wasting money/time on filing fees and preparing the application. Prior art searches can be completed by the inventor or there are plenty of firms that will do it for a fee. The search should include U.S. patents, published U.S. applications (an application is published after 18 months), foreign patents/applications, published articles, or anything else in print with a date.

**What will get you in trouble?**

If you publicly expose your idea more than a year before you submit your patent application, you are out of luck as far as getting a patent. That means you can't write a magazine article about it, you can't sell it, you can't show it at a trade show, etc. This is



US006031451A

United States Patent [19]  
Graves et al.

[11] Patent Number: 6,031,451  
[45] Date of Patent: Feb. 29, 2000

- [54] ELECTRICAL CIRCUITS FOR TURN SIGNAL, HAZARD SIGNAL AND BRAKE SIGNAL LIGHTS
- [75] Inventors: **Danny R. Graves**, Springfield; **Timothy W. Brooks**, Cedar Hill, both of Tenn.
- [73] Assignee: **ACD Tridon Inc.**, Burlington, Canada
- [21] Appl. No.: **09/030,897**
- [22] Filed: **Feb. 26, 1998**
- [51] Int. Cl.<sup>7</sup> ..... **B40Q 1/26**
- [52] U.S. Cl. .... **340/468; 340/458; 340/641; 340/642; 340/475; 340/479; 340/477; 307/10.8**
- [58] Field of Search ..... **340/468 OR, 458, 340/641, 642, 475, 479, 477; 307/10.8**

- [56] **References Cited**
- U.S. PATENT DOCUMENTS**
- |           |         |                   |          |
|-----------|---------|-------------------|----------|
| 4,812,808 | 3/1989  | Ulrich            | 340/468  |
| 5,072,210 | 12/1991 | Kimmelman         | 340/458  |
| 5,075,669 | 12/1991 | Nakadozono et al. | 340/458  |
| 5,614,884 | 3/1997  | Evans             | 340/477  |
| 5,629,670 | 5/1997  | Pabla et al.      | 340/479  |
| 5,770,999 | 7/1998  | Rhodes            | 340/468  |
| 5,828,139 | 10/1998 | Slater            | 307/10.8 |

Primary Examiner—Jeffery A. Hofsass  
 Assistant Examiner—Tai T. Nguyen  
 Attorney, Agent, or Firm—Robert F. Delbridge

[57] **ABSTRACT**

An electrical circuit for turn signal, hazard signal, and brake

signal lights of an automotive vehicle has first and second relays each having an energizable coil and contacts which are in a first configuration when the coil is not energized and a second configuration when the coil is energized. A brake signal switch is operable to supply relative high steady electrical current to the first and second relay contacts, the contacts of the first relay when in the first configuration conducting the relative high steady electrical current to left rear light and the contacts of the second relay when in the first configuration conducting the relative high steady electrical current to a right rear light. The turn signal switch, when operated, also causes relative high electrical current to be supplied intermittently to the first and second relay contacts, the contacts of the first relay presenting an open circuit to the intermittent relative high current when in the first configuration and supplying the relative high intermittent current to a left front and the left rear lights, when in the second configuration to cause the left front and the left rear lights to be illuminated intermittently in a flashing manner, and the contacts of the second relay presenting an open circuit to the relatively high intermittent current when in the first configuration and supplying the relatively high intermittent current to a right front light and the right rear light, when in the second configuration to cause the right front and right rear lights to be illuminated in flashing manner. A hazard signal switch is operable to energize the coils of the first and second relays with relatively low steady electrical current to cause the contacts thereof to move to the second configuration, the hazard switch when operated also causing relatively high electrical current to be supplied intermittently to the first and second relay contacts to cause the left and right front lights and the left and right rear lights to be illuminated in a flashing manner.

7 Claims, 2 Drawing Sheets

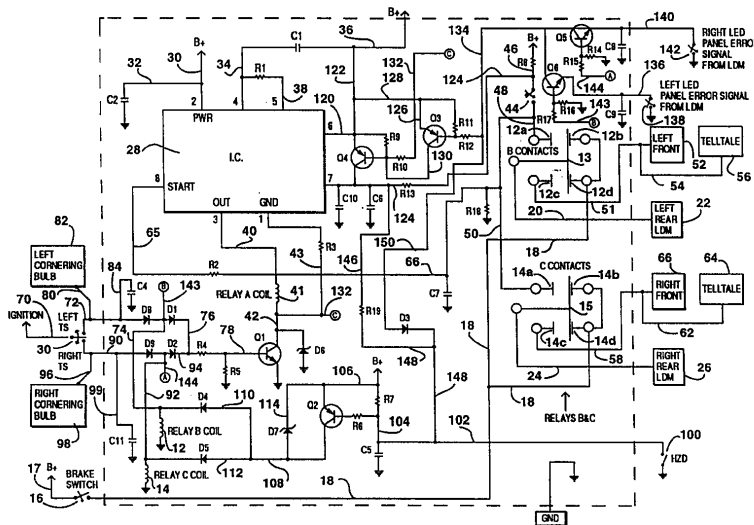


Figure 2. An example of the first page of an issued utility patent.



6,031,451

7

of transistor Q4. It will be noted that resistor R10 is connected to line 132. Enabling transistor Q4 causes the voltage across terminals 6 and 7 of flasher IC 28 to be reduced to the saturation voltage of transistor Q4, it being arranged that the saturation voltage is below the predetermined voltage, such as 85 mV required by the flasher IC 28 to induce the previously described voltage mode.

It is necessary that the above described outage mode of the flasher IC 28 be disabled when the hazard signal switch 100 is actuated. Thus, when hazard signal switch 100 is closed, lines 102, 148 resistor R19 and lines 146, 142 are grounded, thereby grounding terminal 7 of flasher IC 28. This maintains the voltage dropped across terminals 6 and 7 of flasher IC 28 above the pre-determined value, such as 85 mV, required to keep the flasher IC 28 in the normal flash mode. Also, closure of the hazard signal 100 grounds resistor R12 through lines 100, 148, diode D3 and line 150, thereby preventing left and right error switches 138, 142 from initiating an outage mode.

The function of various components of the circuit not specifically described, such as various resistors, capacitors and diodes, will also be readily apparent to a person skilled in the art. For example, the decoupling capacitors are included to minimize the effects of EMI.

FIG. 2 shows a similar circuit diagram to FIG. 1, but without the error sensing function and with the capacitors omitted for clarity. Also for clarity, the same reference numerals have been used to identify the components shown in FIG. 2 which are also shown in FIG. 1. It is therefore believed that further description of the circuit of FIG. 2 is unnecessary. Some minor changes have been made, the nature of which will be readily apparent to a person skilled in the art from the comparison of FIGS. 1 and 2. It should however be mentioned that, in this embodiment, the low current flasher IC 28 is a Telefunken U6438.

Other embodiments of the invention will be readily apparent to a person skilled in the art, the scope of the invention being defined in the appended claims.

We claim:

1. An electrical circuit for turn signal, hazard signal and brake signal lights of an automotive vehicle, said electrical circuit having:

first and second relays each having an energizable coil and contacts which are in a first configuration when the coil is not energized and a second configuration when the coil is energized,

a brake signal switch operable to supply relatively high steady electrical current to the first and second relay contacts, the contacts of the first relay when in the first configuration conducting the relatively high steady electrical current to a left rear light and the contacts of the second relay when in the first configuration conducting the relatively high steady electrical current to a right rear light, whereby operation of the brake switch, when the coils of the first and second relays are not energized, cause the left and right rear brake lights to be illuminated in a steady manner,

a turn signal switch operable to energize the coil of the first relay or the coil of the second relay by relatively low steady electrical current depending on the direction of turn to cause the contacts of the relay concerned to move to the second configuration,

said turn signal switch when operated also causing relatively high electrical current to be supplied intermit-

8

tently to the first and second relay contacts, the contacts of the first relay presenting an open circuit to the intermittent relatively high current when in the first configuration and supplying the relatively high intermittent current to a left front light and the left rear light when in the second configuration to cause the left front and rear lights to be illuminated intermittently in a flashing manner, and the contacts of the second relay presenting an open circuit to the relatively high intermittent current when in the first configuration and supplying the relatively high intermittent current to a right front light and the right rear light when in the second configuration to cause the right front and rear lights to be illuminated in a flashing manner, and

a hazard signal switch operable to energize the coils of the first and second relays with relatively low steady electrical current to cause the contacts thereof to move to the second configuration, the hazard switch when operated also causing relatively high electrical current to be supplied intermittently to the first and second relay contacts to cause the left and right front lights and the left and right rear lights to be illuminated in a flashing manner.

2. An electrical circuit according to claim 1 also including a flasher relay having an energizable coil and a contact operable by energization and de-energization of the flasher relay coil by relatively low steady electrical current or absence thereof respectively to cause said relatively high intermittent current to be supplied to the first and second relay contacts, and an IC flasher unit operable to effect said energization and de-energization of the flasher relay coil.

3. An electrical circuit according to claim 2 including a flasher transistor switch in series with the flasher relay coil providing an open circuit therefor when neither the turn signal switch nor the hazard signal switch is actuated, the actuation of the turn signal switch or the hazard signal switch causing a signal to be sent to the base of the flasher transistor switch to cause the flasher transistor switch to become conducting and enable the flasher relay coil to be energized and de-energized by the IC flasher unit.

4. An electrical circuit according to claim 3 wherein the IC flasher unit has a ground connection in series with the flasher transistor switch whereby the ground connection of the IC flasher unit is broken when neither the turn signal switch nor the hazard signal switch is actuated, with current flow in the IC flasher unit thereby being discontinued.

5. An electrical circuit accordingly to claim 2 including a voltage sensing device for sensing voltage change caused by failure of any one of the front and rear lights, when selected for flashing operation, said voltage sensing device causing the IC flasher unit to effect flashing of another light selected for flashing operation at a frequency different from normal.

6. An electrical circuit according to claim 2 including a left error sensing device and a right error sensing device for sensing an error in the left or right load (?) respectively, said left or right sensing device being operable, when a left or right light respectively has been selected for flashing operation, to cause the IC flasher unit to effect flashing at a frequency different from normal.

7. An electrical circuit according to claim 6 including a means for disabling operation of the left and right error sensing devices when the hazard switch is operated.

\* \* \* \* \*

Figure 3. An example of the claims section of an issued utility patent.

true even if your idea or product is contained inside a larger machine and is not readily visible.

### **Is there any subject matter that gets special treatment?**

Applications can be moved up ahead of others in the examining order if a petition to make the application special is granted. MPEP Chapter 700 lists the reasons that an application might be made special. These reasons include the applicant's health, applicant's age, and topics related to energy resources. In fact, these three reasons result in the application being made special without filing the petition fee. Other reasons, such as someone is infringing on your patentable idea, require the petition fee to be submitted.

### **Patent it yourself?**

Just like you can represent yourself in court, you have the right to patent your ideas yourself. Patent agent and/or attorney fees could be thousands of dollars. Therefore, if you have the capability and fortitude, you can save a lot of money by patenting it yourself.

The process of completing the patent application, communicating with the USPTO patent examiner, submitting the drawings, revising the claims, etc from the initial application submittal until the patent is allowed (approved by the examiner) and issues is called *prosecuting* the patent application. You have the legal right to do all of this yourself as the inventor.

There are many self-help books available on the subject of "patenting it yourself." These books detail the items that are needed for a complete patent application. Of course, you can get the information for free from the USPTO via the MPEP. MPEP Chapter 600, 1500, and 1600 cover the parts, form and content of the utility, design, and plant patent application, respectively.

The form and structure of the patent is very specific. There is no room for creativity when it comes to the form and structure of a patent application. For example, there is a rule for the maximum number of characters (500) in the patent title and the maximum number of words (150) in the patent abstract. These rules must be adhered to or you will get a chance to repeat your work and probably pay fee for the mistake.

Writing the abstract, technical specification, claims, etc is well within the capability of most astute people. However, the offensive use of a patent is directly tied to the claims, therefore, it is critical that quality claims be written in order to make the patent worth its money and effort. The USPTO patent examiner will actually write the claims for you if you request it. Since so much of the value of a patent is contained in the claims, you will want to thoroughly inspect the claims for *value* to you, not just allowability, if the examiner writes the claims for you. Writing effective patent claims is an art form! There are many historic legal cases that have impacted the way claims are written because of

the way they will be interpreted in any future litigation. Examiners may not consider these important litigation concerns when writing claims. This is where an experienced patent professional is very valuable!

While an intelligent person can certainly handle prosecuting a patent application when everything goes right, it is when something goes wrong that a patent agent or attorney is most needed. For instance, if it turns out that your application will interfere with another pending application, an “interference” (see MPEP Chapter 2300) may be declared by the USPTO Director. An interference is a complicated, expensive procedure which would be difficult for the uninitiated to handle.

### **Professional Help**

If you decide to hire a professional to prosecute the patent, you will either hire a patent agent or a patent attorney. These two types of professionals can both successfully get you a patent. However, it is important to understand the differences between the two types of professionals.

A patent agent is a person who does not have a law degree but is authorized to practice a specialized law, patent law, before the USPTO. Patent agents are individuals with technical backgrounds that have passed the Patent Practice Exam that is administered by the USPTO or a contractor. Patent agents may have their own patents as well as experience prosecuting patent applications for others. They may also have many years of technical experience. However, if litigation becomes necessary, a patent agent can't represent you in court.

A patent attorney is just that, an attorney, who has passed the Patent Practice Exam that is administered by the USPTO or a contractor. Patent attorneys may not have as much technical experience as a patent agent. However, patent attorneys cannot only prosecute your patent application but can also represent you in court in the event litigation becomes necessary.

Either a patent agent or attorney can be equally effective in successfully getting you a patent. The typical patent agent *may* have a technical edge over the typical patent attorney especially if they have worked on the technical side for many years instead of going to law school. This may allow the patent agent to see technical features that would be unapparent to a patent attorney. However, if litigation becomes necessary, only a patent attorney can help you in court.

Inventors should be wary of invention promotion companies. They offer to represent the inventor for a hefty sum of money then they often do nothing. Make sure you deal with a *registered* patent agent or an attorney. The USPTO Web site has a list of the registered patent practitioners.

### **How much will it cost?**

If you prosecute your own patent application, you will only have to contend with the fees that the USPTO imposes. These fees can be substantial. There are fees for filing your application, examining your application, searching your invention, fees for a large number of claims, and on and on. I won't list any fees here since there are so many and they change quite often. A full up-to-date listing of fees is available on the USPTO Web site.

If you utilize a patent agent or attorney, you will also be responsible for paying their fee for preparing and prosecuting your patent application. You can find plenty of patent agents on the Internet by searching for "patent agent." Depending on the complexity of the invention, a patent agent may charge \$1000 to \$3000 for a utility patent application. A design or plant patent application may result in a charge of only around \$500 from a patent agent. Generally, patent searches are an extra charge of around, say \$500. Some patent agents will exchange their services for a percentage licensing agreement. They will do this only if they think your invention has the potential to generate royalties.

A patent attorney will generally end up being more expensive than a patent agent since they customarily charge by the hour and many work for large firms. A patent attorney may also require a retainer to be paid initially.

The USPTO maintains a list of registered patent agents and attorneys. This list is available on their Web site. However, the USPTO will not *recommend* a specific agent or attorney.

### **Small Entity Status**

If you qualify as a "small entity," you get to pay *half* the amount on certain USPTO fees. The definition of small entities includes individuals, small business concerns as defined by the Small Business Administration (SBA), and nonprofit organizations. Small entities do not get all fees reduced but most of the big fees such as the application fee, issue fee, and maintenance fees are reduced by 50 percent. Therefore, it pays to be a small entity! However, if you license or assign your invention to a company that does not qualify as a small entity, the small entity status may be revoked.

### **Summary**

Hopefully, this course has cleared up the patenting process a bit for you by explaining the types of patents that are available, what determines patentability, costs of getting a patent, subject matter that gets special treatment, patent drawing requirements, acting as your own patent attorney/agent, and the difference between a patent agent and a attorney.

Getting a patent can often be costly, time consuming, and difficult whether you complete the process yourself or hire a professional. However, a patent will protect your unique idea and keep others from cashing in on it. It is a process that has had 200 years to become complicated and convoluted. However, it has also proven itself to be a very effective way to protect intellectual property.

Of course, do not totally rely on the information in this course for your patent activities. It should be used as a general guide only. You should always consult the *latest* USPTO requirements or a registered patent agent or attorney. Finally, a U.S. patent protects your invention in the United States only. If you want to protect your invention in foreign countries, you must file a patent application in each country that you desire protection. Search for information on the Patent Cooperation Treaty (PCT) on the USPTO Web site for useful information on filing a patent application in other countries. The references/related links listed on this course are also excellent sources of information for the PCT and patents in general.

### References/Related Links:

1. Web site for United States Patent and Trademark Office, [www.uspto.gov](http://www.uspto.gov)
2. Manual of Patent Examining Procedure (MPEP) - available on [www.uspto.gov](http://www.uspto.gov)
3. United States Code (USC) Title 35 – Patent Laws - available on [www.uspto.gov](http://www.uspto.gov)
4. Code of Federal Regulations (CFR) Title 37 – Patent Rules - available on [www.uspto.gov](http://www.uspto.gov)
5. WIPO Intellectual Property Digital Library, <http://www.wipo.int/ipdl/en/index.jsp>
6. European Patent Office (EPO) Esp@cenet patent database, [http://gb.espacenet.com/search97cgi/s97\\_cgi.exe?Action=FormGen&Template=gb/en/advanced.htm](http://gb.espacenet.com/search97cgi/s97_cgi.exe?Action=FormGen&Template=gb/en/advanced.htm)
7. Protecting Your Ideas – The Inventor’s Guide to Patent’s, Joy L. Bryant, Academic Press, 1997
8. How to Make Patent Drawings Yourself, Jack Lo and David Pressman, NOLO, 2001