# Patent Process and Patent Search

**Technological ideas are sometimes protected through the process of patenting. (ITEA 3-I)**

# Patent Process and Patent Search

Technological ideas are sometimes protected through a process of **patenting**. The protection of a creative idea is central to the sharing of technological knowledge.

Most often an idea is protected through the long and tedious process of obtaining a **patent**.

Without a patent, others do not have to pay you to make, sell or use your invention. With a patent, you own your idea. You can sell or license your rights.

# Criteria for a patent

A patentable invention must satisfy three criteria:

- **Novelty** - the invention must be different from anything known before; it must not have been described in a prior publication and it must not have been publicly used or sold.
- **Utility** - the claimed invention must be useful. If it is a machine, it must function according to its intended purpose; if it is a novel chemical, it must exhibit an activity or have some utility.
- **Nonobviousness** - the invention must not be a logical extension of that which has been done before, i.e., it must not be readily apparent to one who is skilled in the particular art to which the invention pertains.

# Categories of Patents

There are three major categories of patents:

1. **Utility** - for any "new and useful process, machine, manufacture, composition of matter or any new and useful improvement thereof". The term "composition of matter" relates to chemical compositions and may include mixtures of ingredients as well as new chemical compounds. Utility patents can be further divided into three types: chemical, mechanical and electrical. The vast majority of patents are in this category.
2. **Design** - granted to any new, original and ornamental design for an article of manufacture. E.g., a chair is recognized as something on which to sit but its design can take many forms. The appearance of the item is what is protected.
3. **Plant** - patents are granted for an invented or discovered and asexually reproduced distinct and new variety of plant. Asexually propagated plants are those that are reproduced by means other than from seeds, such as by the rooting of cuttings, budding, grafting, etc. Design and plant patents are granted for shorter terms than utility patents.

# Purpose of Patent

The purpose of a patent is to safeguard the investment of the inventor or creator and to give credit where and when it is due.

With a patent you can protect names, logo designs, initials and slogans as trademarks. Written material, artistic works, video and music are protected by copyright.

Patents are an exclusive right granted by the federal government to the inventors of new and useful machines, articles, substances or processes.

# Patent Process

To receive a patent, inventors must apply to the federal government. The term of the exclusive right lasts for 20 years from the date when the application is filed.

If the patent is granted, the government publishes a full description of the invention and its use in the patent disclosure.

Patents are only issued after an administrative application procedure has been completed in the **United States Patent Office.** The inventor must submit an application fully describing and explaining the invention, and setting out the limits of technology being claimed. Patent examiners have technical training in many different fields, and each application is assigned to an examiner who is knowledgeable in that particular type of technology.

# Patent Examination

The patent examiner performs a search to see if the same or similar technology has already been claimed in a patent or publicly disclosed in other types of publications.

If the patent examiner has objections to the application, you can:

- Amend the claims of the application in order to meet the examiner's objections
- Attempt to convince the examiner that the application meets the requirements of the patent law
- Start an appeals process

# Patent Law

Drafting successful patent applications requires not only an understanding of patent law, but also knowledge of the technology being described and claimed. For this reason, patent agents and attorneys must have scientific or engineering training.

As in copyright cases, there is no such thing as a worldwide patent. Successful applications to the United States Patent Office will result in a patent that is good only in the United States. If you want patent protection in other countries, you must apply for a patent in the patent office of each country.

There are three main international patent offices:

- **United States: http://www.uspto.gov**
- **Japan: http://www.jpo-miti.go.jp/**
- **European Union: http://www.european-patent-office.org**

# Patent Process

Inventors must be extremely careful about their activities prior to applying for a patent. The United States gives an inventor a one-year grace period, after an invention has been publicly disclosed, to apply for a patent. The clock on this grace period starts running when you:

- **Place the invention on sale**
- **Publish a description of the invention**
- **Offer a detailed description of the invention at a public meeting**
- **Place the invention into the hands of the public**
- **If the inventor does not apply for a patent within a year of public disclosure, the opportunity to get a patent is permanently lost.**

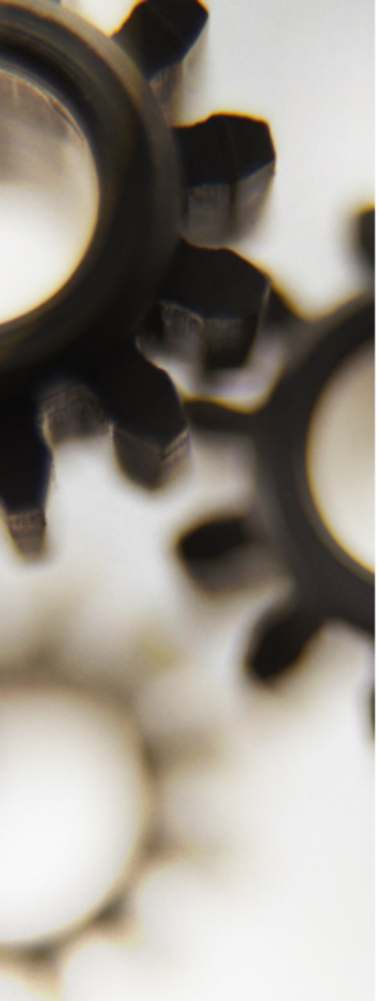
When two inventors develop identical inventions at about the same time, most countries will grant a patent for such an invention to the inventor who files their application first. The United States may allow a subsequent inventor to prove that they invented the invention before the first applicant.

# Patent Process and Patent Search

The total cost of obtaining a patent typically falls in the range of $8,000-15,000. Actual costs may differ greatly.

U.S. Patent Office proceedings to determine priority of invention are called interferences. These proceedings are complicated legal contests, similar to litigation, and may take years to resolve.

United States law requires that a patent bear the name of the inventor of the claimed invention. Sometimes the employer may agree to share royalties with the employee, or offer a bonus or other reward in exchange for the assignment of the rights in the patent. However, no matter what type of arrangement the inventor has with his or her employer, the employer's name cannot be substituted for that of the inventor on the patent.



# Patent Process: Summary

- A patent is a set of exclusive rights granted by a government to a person for a fixed period of time in exchange for the regulated, public disclosure of certain details of an invention.
- A patent grants the inventor of a new product or process exclusive rights to the manufacture, use, or sale of that invention .
- Obtaining a patent requires the service of a patent attorney.
- A patent is the only way to protect an idea or invention from being used without your permission.
- A patent will protect names, logo designs, initials and slogans as trademarks. Written material, artistic works, video and music are protected by copyright.
- You can sell or license your patent to make money.
- A patent is good for 20 years.
- A patent is only good in the country for which the patent is granted .
- Obtaining a patent is a long, tedious, and expensive process.