

## Copyrights, Patents, & Trademarks

Ronald J. Glotzbach  
Purdue University

Sources: 1) U.S. Copyright Office - <http://www.copyright.gov/>  
2) The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## Copyrights, Patents, & Trademarks

- Many people confuse copyrights, trademarks, and patents.
- These slides are meant to help understand the difference between them and point you to reliable sources where you can learn more about them and how they apply to you and your career.

## Copyrights

Ronald J. Glotzbach  
Purdue University

Source: U.S. Copyright Office - <http://www.copyright.gov/>

## What is a copyright?

- Copyright is a form of protection provided by the laws of the United States ([title 17](#), U. S. Code) to the authors of "original works of authorship," including literary, dramatic, musical, artistic, and certain other intellectual works. This protection is available to both published and unpublished works. [Section 106](#) of the 1976 Copyright Act generally gives the owner of copyright the exclusive right to do and to authorize others to do the following:

Source: <http://www.copyright.gov/>

## What is a copyright? (cont.)

- To reproduce the work in copies or phonorecords;
- To prepare derivative works based upon the work;
- To distribute copies or phonorecords of the work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
- To perform the work publicly, in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works;
- To display the work publicly, in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work; and
- In the case of sound recordings\*, to perform the work publicly by means of a digital audio transmission.

Source: <http://www.copyright.gov/>

## U.S. Copyright Office

- You can find extensive detail on copyright law at:
  - <http://www.copyright.gov/>
  - U.S. Copyright Office  
101 Independence Ave. S.E.  
Washington, D.C. 20559-6000

Source: <http://www.copyright.gov/>

## What is protected:

- Copyright protects “original works of authorship” that are fixed in a tangible form of expression. The fixation need not be directly perceptible so long as it may be communicated with the aid of a machine or device. Copyrightable works include the following categories:
  - literary works;
  - musical works, including any accompanying words
  - dramatic works, including any accompanying music
  - pantomimes and choreographic works
  - pictorial, graphic, and sculptural works
  - motion pictures and other audiovisual works
  - sound recordings
  - architectural works

Source: <http://www.copyright.gov/>

## What is **not** protected:

- Several categories of material are generally not eligible for federal copyright protection. These include among others:
  - Works that have not been fixed in a tangible form of expression (for example, choreographic works that have not been notated or recorded, or improvisational speeches or performances that have not been written or recorded)
  - Titles, names, short phrases, and slogans; familiar symbols or designs; **mere variations of typographic ornamentation, lettering, or coloring**; mere listings of ingredients or contents
  - Ideas, procedures, methods, systems, processes, concepts, principles, discoveries, or devices, as distinguished from a description, explanation, or illustration
  - Works consisting entirely of information that is common property and containing no original authorship (for example: standard calendars, height and weight charts, tape measures and rulers, and lists or tables taken from public documents or other common sources)

Source: <http://www.copyright.gov/>

## Copyright Registration for Computer Programs

- Definition:
  - A “computer program” is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.
- Extent of Copyright Protection
  - Copyright protection extends to all the copyrightable expression embodied in the computer program. **Copyright protection is not available for ideas, program logic, algorithms, systems, methods, concepts, or layouts.**

Source: <http://www.copyright.gov/>

## Copyright Registration for Derivative Works

- A “derivative work,” that is, a work that is based on (or derived from) one or more already existing works, is copyrightable if it includes what the copyright law calls an “original work of authorship.” Derivative works, also known as “new versions,” include such works as translations, musical arrangements, dramatizations, fictionalizations, art reproductions, and condensations. Any work in which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship is a derivative work or new version.

Source: <http://www.copyright.gov/>

## Copyright Registration for Derivative Works (cont.)

- The new material must be original and copyrightable in itself.
- Titles, short phrases, and **format**, for example, are **not** copyrightable.

Source: <http://www.copyright.gov/>

## Copyright Registration for Automated Databases

- Definition
  - An automated database is a body of facts, data, or other information assembled into an organized format suitable for use in a computer and comprising one or more files.

Source: <http://www.copyright.gov/>

## Copyright Registration for Automated Databases (cont.)

- The copyright law does not specifically enumerate databases as copyrightable subject matter, but the legislative history indicates that Congress considered computer databases and compilations of data as “literary works” subject to copyright protection. **Databases may be considered copyrightable as a form of compilation**, which is defined in the law as a work “formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship.”

Source: <http://www.copyright.gov/>

## Copyright Registration for Automated Databases (cont.)

- Extent of Copyright Protection
  - Copyright protection extends to the compilation of facts if the compilation represents original authorship. In some instances some or all the contents of a database, new or revised, may also be copyrightable, as in the case of a full-text bibliographic database.

Source: <http://www.copyright.gov/>

## Copyright Registration for Automated Databases (cont.)

- Extent of Copyright Protection
  - Copyright protection is **not** available for:
    - ideas, methods, systems, concepts, and layouts
    - individual words and short phrases, individual unadorned facts, and
    - the selection and ordering of data in a database where the collection and arrangement of the material is a mechanical task only and represents no original authorship; e.g., merely transferring data from hard copy to computer storage

Source: <http://www.copyright.gov/>

## Notice of Copyright

- The use of a copyright notice is no longer required under U.S. law, although it is often beneficial
- The use of the copyright notice is the responsibility of the copyright owner and does not require advance permission from, or registration with, the Copyright Office

Source: <http://www.copyright.gov/>

## Notice of Copyright

- Form of Notice for Visually Perceptible Copies
  - The notice for visually perceptible copies should contain all the following three elements:
    - 1) The symbol © (the letter C in a circle), or the word “Copyright,” or the abbreviation “Copr.”; and
    - 2) The year of first publication of the work. In the case of compilations or derivative works incorporating previously published material, the year date of first publication of the compilation or derivative work is sufficient. The year date may be omitted where a pictorial, graphic, or sculptural work, with accompanying textual matter, if any, is reproduced in or on greeting cards, postcards, stationery, jewelry, dolls, toys, or any useful article; and
    - 3) The name of the owner of copyright in the work, or an abbreviation by which the name can be recognized, or a generally known alternative designation of the owner.

■ Example: © 2006 John Doe

Source: <http://www.copyright.gov/>

## Patents

Ronald J. Glotzbach  
Purdue University

Source: *The United States Patent and Trademark Office*  
<http://www.uspto.gov/>

## What is a Patent?

- A patent for an invention is the grant of a property right to the inventor, issued by the United States Patent and Trademark Office.
- Generally, the term of a new patent is 20 years from the date on which the application for the patent was filed in the United States or, in special cases, from the date an earlier related application was filed, subject to the payment of maintenance fees.
- U.S. patent grants are effective only within the United States, U.S. territories, and U.S. possessions.
- Under certain circumstances, patent term extensions or adjustments may be available

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## What is a Patent? (cont.)

- The right conferred by the patent grant is, in the language of the statute and of the grant itself, “the right to exclude others from making, using, offering for sale, or selling” the invention in the United States or “importing” the invention into the United States.
- What is granted is **not** the right to make, use, offer for sale, sell or import, **but the right to exclude others** from making, using, offering for sale, selling or importing the invention.
- Once a patent is issued, the patentee must enforce the patent **without** aid of the USPTO

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## Types of Patents

- There are 3 types of patents:
  - 1) Utility patents may be granted to anyone who invents or discovers any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof;
  - 2) **Design** patents may be granted to anyone who invents a new, original, and ornamental design for an article of manufacture; and
  - 3) Plant patents may be granted to anyone who invents or discovers and asexually reproduces any distinct and new variety of plant.

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## What is not patentable?

- An inventor cannot receive a patent for **perpetual motion devices, abstract ideas, laws of nature, and naturally occurring substances.**
- An inventor cannot receive a United States patent for an invention **publicly disclosed** more than 12 months ago.

Source: National Inventor Fraud Center  
<http://www.inventorfraud.com/notpatentable.htm>

## What is not patentable? (cont.)

- Public disclosure includes any sale, exhibit at trade show, or printed in a publication, with a few exceptions.
- You should seek a Patent Attorney's opinion if you have any questions whether your invention is patentable.
- It should also be noted that you do not need a prototype when seeking patent protection - you only need to be able to describe the invention in sufficient detail so that one skilled in the art could construct your invention.

Source: National Inventor Fraud Center  
<http://www.inventorfraud.com/notpatentable.htm>

## Patents and Websites

- In general, you can patent a part of a website, but not an entire website.
  - Examples of this include:
    - Amazon's One-Click method
    - Search engine optimization or Ranking system

## Patents and Websites (cont.)

- Sometimes it's better to protect your secrets than attempt to patent...
  - In the time it takes to obtain a patent for a part of your website, the technology or business practice will have moved forward enough that by the time your patent is awarded, it is no longer needed.
  - It is also costly to pursue a patent.

## Software Patents

- **Software patents** are patents on computer-implemented inventions.
- The European Patent Office (EPO) provides a general definition of a computer implemented invention as "an expression intended to cover claims which involve computers, computer networks or other conventional programmable apparatus whereby prima facie the novel features of the claimed invention are realised by means of a program or programs"

Source: Wikipedia -- [http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)

## Software Patents vs. Copyright

- Software patents are not the same as software copyright.
- Under international agreements, such as the WTO's TRIPs Agreement, any software written is automatically covered by copyright.
- This allows the copyright owner to prevent another entity from directly copying the **source code**.
- There is no need to register code in order to get copyright protection.
- In the US, however, if an author does register source code they may collect punitive damages if their code is copied without a license. Copyrights may be enforceable for up to 90 years.

Source: Wikipedia -- [http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)

## Software Patents vs. Copyright (cont.)

- Patents, on the other hand, give their owners the right to prevent others from using a claimed invention, **even if there was no copying involved**.
- A patent claim is a one sentence definition of a given invention, often in the form of a method or system for implementing the invention.

Source: Wikipedia -- [http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)

## Software Patents (cont.)

- Both the EU and the US have traditionally restricted the ability to patent software. This has led to several proposals for some very narrow definitions of what software actually is. For example:
  - A piece of code not relating to "the use of controllable forces of nature to achieve predictable results".
  - A piece of code relating solely to the "**processing, handling and presentation of information**".
  - A piece of code with no "technical effect" (depending in turn on how one chooses to define "technical").
  - A piece of code as an abstract listing, not actually running on a programmable device.
  - A piece of code with merely literary merit, rather than any identifiable functional benefits.

Source: Wikipedia -- [http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)

## Trademarks

Ronald J. Glotzbach  
Purdue University

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## What is a Trademark?

- A **trademark** is a **word, name, symbol, or device** that is used in trade with goods to indicate the source of the goods and to distinguish them from the goods of others.
- A **servicemark** is the same as a trademark except that it identifies and distinguishes the **source of a service** rather than a product.
- The terms “trademark” and “mark” are commonly used to refer to both trademarks and servicemarks.

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## What is a Trademark? (cont.)

- Trademark rights may be used to **prevent others from using a confusingly similar mark**, but not to prevent others from making the same goods or from selling the same goods or services under a clearly different mark.
- Trademarks which are used in interstate or foreign commerce may be registered with the USPTO.
- The registration procedure for trademarks and general information concerning trademarks is described on a separate document entitled “Basic Facts about Trademarks”

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## Novelty And Non-Obviousness, Conditions For Obtaining A Patent

- In order for an invention to be patentable it must be new as defined in the patent law, which provides that an invention cannot be patented if:
  - “(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent,” or
  - “(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one year prior to the application for patent in the United States . . .”

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>

## Intellectual Property

Ronald J. Glotzbach  
Purdue University

Sources: 1) The United States Patent and Trademark Office  
<http://www.uspto.gov/>  
2) World Intellectual Property Organization  
<http://www.wipo.int/portal/index.html.en>

## What is Intellectual Property?

- **Creations of the mind** - creative works or ideas embodied in a form that can be shared or can enable others to recreate, emulate, or manufacture them.
- There are four ways to protect **intellectual property**:
  - Patents
  - Trademarks
  - Copyrights
  - Trade secrets

Source: The United States Patent and Trademark Office  
<http://www.uspto.gov/>