

# UNIVERSITY OF IDAHO LIBRARY

## GUIDE TO PATENT SEARCHING

### **Types of Patents**

- Utility:** Must be a Machine, Article of Manufacture, Process, Composition of Matter, or New Use process. Account for over 90% of patents issued.
- Design:** Protects new, original, and ornamental design of manufactured products. Design must be nonfunctional and integrally part of the manufactured product.
- Plant:** Covers **asexually** reproduced living plants.

### **Utility Patent Eligibility Requirements**

1. Must fit into one of the established **Statutory Classes** covered in above definition of utility patent.
2. Must have some **Utility** (i.e. be useful).
3. Must have some **Novelty** (i.e. must somehow be different from all previous inventions).
  - a. Physical difference between your invention and previous inventions.
  - b. New combinations made by using previous aspects of two or more different inventions.
  - c. New use of a previous invention.

*Ascertaining Novelty is where the "prior art" search comes in.*
4. Must be **Unobvious** to someone who is skilled in the appropriate field.

### **Prior Art**

- Not limited to inventions patented in the U.S.
- Any **published** information, from anywhere in the world, is considered prior art.
- Even **unpublished** works, such as a Master's thesis, can be valid prior art.
- Your invention is novel if no one prior art reference contains all of the same elements used in the same way and for the same purpose.
- **PRIOR ART ≠ CLAIMS OF PATENT.** The patent's claims define the legal scope of the patent. This can be more narrow than the prior art aspect.
- Pending patent applications are also valid prior art. Beginning in March 15, 2001, applications are published weekly and are published 18 months from earliest claimed filing date (with exceptions)

## **Classification System**

The USPC divides the entire set of U.S. patents into major technology divisions called classes. The primary groups are called **classes** and are further subdivided into **subclasses**. The ordered listing of subclasses that make up a class is called a **class schedule**.

### ***Bases for Class Creation:***

1. Proximate function – similar devices that operate in similar ways following similar natural laws that produce similar results  
~Agitating – 366  
~Cutting – 83
2. Proximate effect or product made  
~Telephonic Communication – 379  
~Boot and Shoe Making – 12
3. Structure  
~Compositions: Ceramic – 501
4. Intended use  
~Chemistry: Fertilizers – 71  
~Drug, Bio-Affecting and Body Compositions - 424

**TO DO A COMPREHENSIVE PATENT SEARCH, YOU  
MUST GO THROUGH THE CLASSIFICATION SCHEME  
AS EXPLAINED BELOW.**

### ***Steps to Conduct a Prior Art Search Online***

1. Access the USPTO website at <http://www.uspto.gov>  
Click on [Search](#) under [Patents](#) (left side of page).
2. *Index to the U.S. Patent Classification* (name of link is “USPC Index”)  
Click on [Tools to Help in Searching by Patent Classification](#) (in purple box). Click on [USPC Index](#)  
Make a list of words that describe your idea. Think of any possible synonyms. Click on the first letter of the word or phrase. Record the class/subclass number(s) for each term found in the index.
  - ✓ **What does the invention do?** What’s the purpose of the invention?
  - ✓ **What’s the end result?** Is there anything unique? Does it have special or unexpected features?
  - ✓ **What is it made of?** Is the invention directed to a method or material of fabrication?
  - ✓ **What is it used for?** Does it have a special use?
  - ✓ **Don’t just think nouns (physical items), think verbs (actions)**If searching all the terms you can think of in the index is not producing results, try:
  - a) Step 6 below. Examine any patents that look relevant and note their class/subclass.
  - b) Scroll through the listing of class numbers and titles looking for possible relevant classes. Read the definition for the class.  
<http://www.uspto.gov/go/classification/selectnumwithtitle.htm>

3. *Manual of Classification*

<http://www.uspto.gov/go/classification/index.htm>

The class and subclass numbers are hyperlinked from the index. You can also enter them into the search box on the *Manual of Classification* page.

It is a good idea to scan from the top of the class and look at all main line groupings and then major coordinate subclasses. You want the subclasses to be as specific as possible.

4. *Patent Classification Definitions*

<http://www.uspto.gov/go/classification/index.htm>

Clicking on the hyperlinked class and subclass numbers in the *Manual of Classification* will take you to the definitions.

The definitions explain which subject areas are **included** and **excluded** in the class and its subclasses. Other classes to consult may be suggested. The definitions are invaluable, particularly if you have trouble understanding the language used in the class schedules.

5. *Searchable Full-text Databases*

<http://www.uspto.gov/patft/index.html>

Clicking on the red “P” to the left of the subclass number will take you to all the patents assigned that classification.

**or**

Select “Quick Search” in the **Issued Patents** database at the Searchable Full-text Databases screen. Type your **class/subclass** in the search box. Select “Current U.S. Classification” from the Field 1 pull-down menu. Select years to be searched from the Select Years pull-down menu. This will retrieve a listing of U.S. patents that have been classified in that class/subclass. Click the “images” button to retrieve the full patent. You must also search the *Patent Applications* database (remember that patent applications are also valid prior art).

6. *Keyword Searching*

<http://www.uspto.gov/patft/index.html>

A keyword search in the *Patent Grants* and *Patent Applications* database is a useful search strategy to use in **addition** to a classification search.

**BE AWARE THAT WITH A KEYWORD SEARCH:**

You are only searching full-text back to 1976.

The language of patents is often “patentese”.

You will miss pertinent patents with keyword searching.

You may retrieve hundreds of patents, few of which are relevant.

**Tutorial**

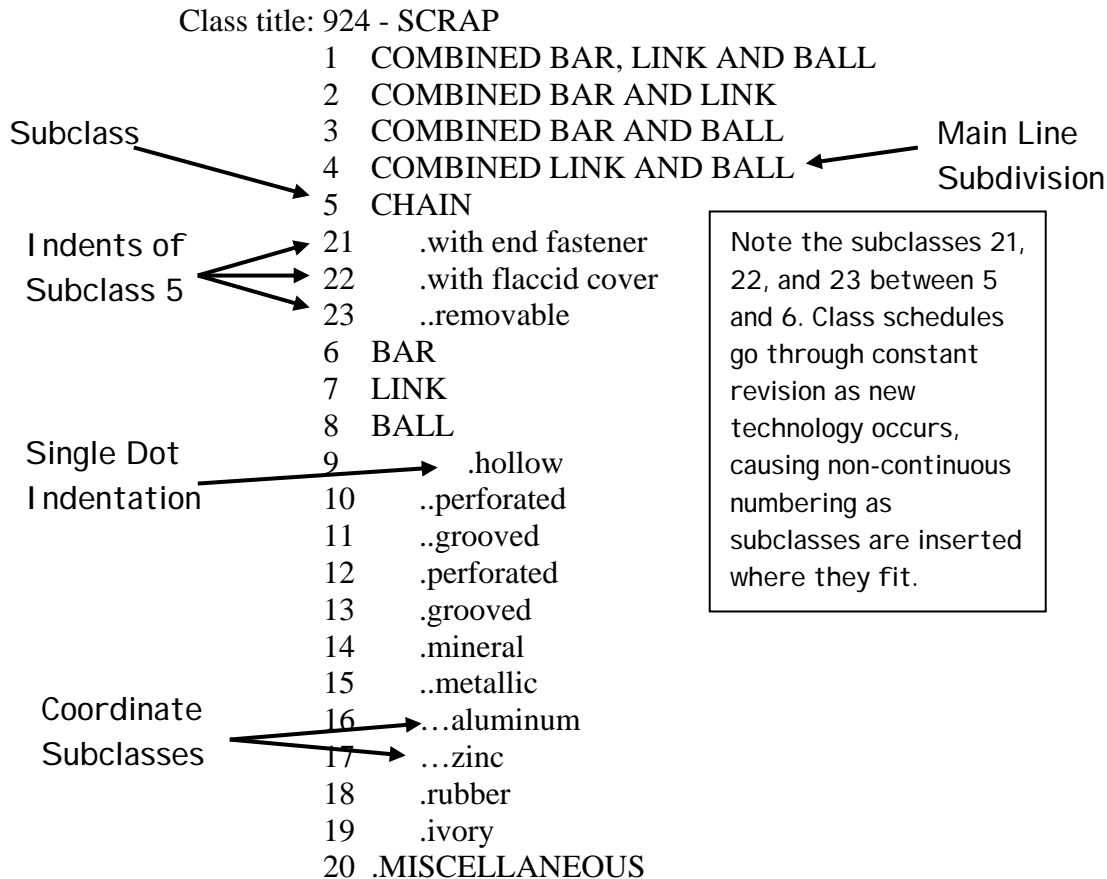
<http://www.lib.utexas.edu/engin/patent-tutorial/index.htm>

The McKinney Engineering Library (University of Texas at Austin) has produced an excellent web tutorial on patent searching. It covers the process of doing a patentability search for a computer mouse.



APPENDIX A

**Hypothetical Class Schedule**  
*Classifies scrap in a junkyard*



Within the class schedule more complex ideas are listed first, with items of lesser complexity following. The above demonstrates the hierarchical arrangement of the subclasses. **Main line subdivisions** are typed in all capital letters. The uncapitalized subclasses with dots are **indented** subclasses and are named by the level of indentation. For example, subclass 21 is called a **second line or single dot indentation**. All subclasses indented under a superior concept are generally referred to as that concept's **indents**. Subclasses with the same level of indentation are referred to as **coordinate** subclasses, provided that some superior subclass is not located between them. In our hypothetical schedule, subclasses 18 and 14 are coordinate to each other, but 21 and 9 are not.

*Example*

The complete title of subclass 17 would be read as "zinc metallic mineral ball scrap. If something was classified in 924/17 it would need to include all of these elements.

## ***APPENDIX B***

### **BOOK LIST PATENTS AND INVENTIONS**

Nolo publishes many excellent books on trademarks and patents, useful for the novice. They issue new printings and new editions periodically. Patent information changes continuously—use the most current information. The most current printing or edition can be found at the Nolo website:  
<http://www.nolo.com>

Ardis, Susan. *An Introduction to U.S. Patent Searching: the Process*. Englewood, Colo. : Libraries Unlimited, 1991.  
*Although this book is somewhat dated, it does a good job of explaining patent basics.*

Grissom, Fred E. and Pressman, David. *The Inventor's Notebook*. Berkeley, CA : Nolo.

Hitchcock, David. *Patent Searching Made Easy: How to do Patent Searches on the Internet and in the Library*. Berkeley, CA : Nolo.

Pressman, David. *Patent it Yourself*. Berkeley, CA : Nolo.

Pressman, David and Stim, Richard. *Nolo's Patents for Beginners*. Berkeley, CA : Nolo.

**ANY LISTING OF PATENTS YOU RECEIVE AND ANY ADVICE YOU RECEIVE FROM ANYONE AS TO PATENTABILITY IS TENTATIVE. ONLY THE U.S. PATENT OFFICE CAN RULE ON PATENTABILITY OR ISSUE A PATENT.**

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