

# Training Manual

IPR is concerned with ownership and control of ideas - ?intellectual output?. It is an important issue in research both because you must avoid infringing others' IPRs and know your own rights.

?Intellectual Property Rights (IPR) or intellectual property (IP) are the rights given to a person over the creation of their minds?

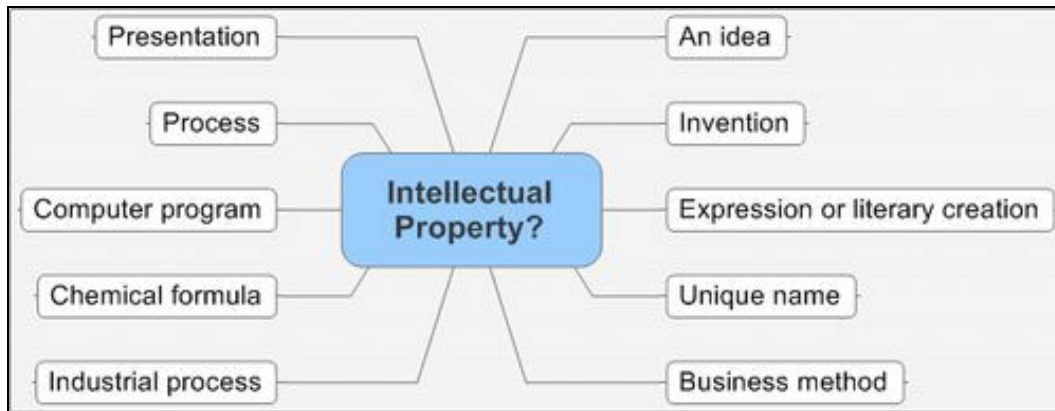
?They usually give the creator an exclusive rights over the use of his/her creation for a certain period of time?

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## What is Intellectual Property?

An intellectual property is any product of the human intellect that is unique, novel, and unobvious (and has some value in the marketplace).



## IPR legislation

The idea of IPR legislation is to protect all owners of Intellectual Property Covered by international and national law:

- International: Berne Convention for the Protection of Literary and Artistic Works (1886 onwards)
- European Union legislation UK: Copyright, Designs and Patents Act(1988)

## Patent

A patent is a contract between the government and the inventor, in other words it is a legal protection granted by the government.

The government gives the inventor the right to exclude others from making, using or selling the invention for a term of years. The exclusive right does not give the inventor the right to make, use or sell his invention.

The inventor gives the public a full and complete disclosure of the invention with a teaching of how it works.

- The right created by a patent is a monopoly right
- The right to take action against any person exploiting the patented invention in the country without the agreement of the patent owner
- Patent are given only for inventions
- Once issued, patentee must enforce the rights

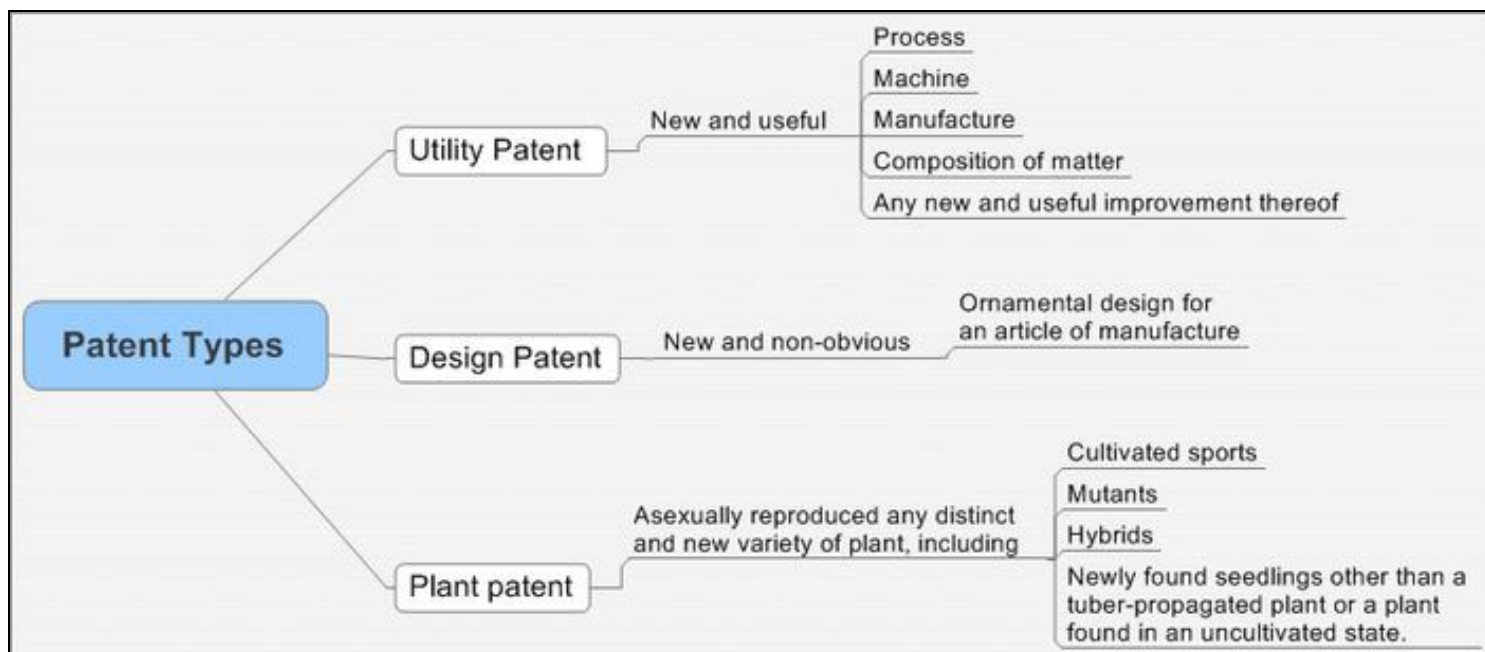
## What is an invention?

Inventions are solutions to specific problems in the field of technology.

- An invention may be related to product or process
- Unity of invention
  - ◆ Only one patent is granted to one invention

## Types of Patents

There are **three different types of patents** for which an inventor may apply:



## Why Patent?

Patents are most important of IP because of:

- Patents are a way to make more money from those who obtain a patent
- Patent policies can be tailored by a country based on its need to foster and promote industrial development
- Patents enable Research and Development
- Most importantly, patent provides the most fool proof form of IP rights

## Patentability requirement

Must meet the following three criteria

- **Utility** - The invention must perform some useful function for society, i.e. it must have
  - ◆ useful purpose
  - ◆ operativeness (invention must serve purpose)
- **Novelty** - It must be new, i.e. it must
  - ◆ Not known or used by others
  - ◆ Different from prior art
  - ◆ Not patented or publicly disclosed previously

**Note:** 1 year grace period in US and Canada most other jurisdictions have absolute novelty requirement

- **Non-Obvious** ? It should not be obvious to a person ordinary skilled in the art, i.e.

?sufficiently different from what has been used or described before that it may be said to be nonobvious to a person having ordinary skill in the area of technology related to the invention?

## How do I get a patent?

To get a patent on an INVENTION,

- You must have an invention that is patentable
- You must describe the invention and apply for a patent
- The patent office must examine the patent (and criticize it) and hopefully grant/issue the patent
- ? and you must pay fees and argue/justify/clarify your invention through the prosecution process

## What can I patent

The list of inventions which are/and not patentable

- **Inventions patentable**
  - ◆ Art, Process, Method or Manner of manufacture;
  - ◆ Machine, Apparatus or other Articles;
  - ◆ Substances produced by Manufacturing
  - ◆ Computer Software which has Technical application to Industry or is used with Hardware
  - ◆ Product Patent for Food / Chemical / Medicines or Drugs
- **Inventions not patentable**
  - ◆ Frivolous or obvious inventions.
  - ◆ Inventions which could be contrary to law or morality or injurious to human, animal or plant life and health or to the environment.
  - ◆ Mere discovery of the scientific principle or the formulation of an abstract theory or discovery of any living thing or non-living substances occurring in nature
  - ◆ Mere discovery of any new property or mere new use for known substance or the mere use of a known process, machine or apparatus- unless results to new products or employs one new reactant.
  - ◆ Producing a new substance by mere admixtures of substances.
  - ◆ Mere arrangement / rearrangement or duplication of known devices functioning independently.
  - ◆ Method of agriculture and horticulture

- ◆ Any process for the medicinal or surgical, curative prophylactic, diagnostic, therapeutic or other treatment of human beings, animals to render them free of disease or to increase their economic value or that of their products.
- ◆ The biological processes for production or propagation of plants and animals in whole or any part thereof other than micro-organisms but including seeds, varieties and species (new plant varieties can be protected by the protection of plant varieties and farmers act 2001).
- ◆ A mathematical or business method or algorithms.
- ◆ A Computer Programme per se other than its technical application to industry or a combination with hardware.
- ◆ Aesthetic creation including cinematography and television production.
- ◆ Method for performing mental act or playing game.
- ◆ Presentation of information.
- ◆ Topography of Integrated Circuits.
- ◆ Invention which in effect, is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known components.
- ◆ Inventions relating to Atomic Energy.

## Patent Searching

Patent searching is a challenging task many searchers choose to do in order to decide on a course of action that will ultimately determine their legal rights. Conducting the searches is challenging precisely because the process involves multiple steps using resources with which many searchers are not familiar. By comparison, patent experts spend many hours in training and many hours searching inventions in their daily work.

For example, patent examiners at the United States Patent & Trademark Office (USPTO) spend about twelve hours investigating each patent application to determine whether the invention it describes is patentable. During that time, the examiner consults an average of thirty-eight databases containing patent and non-patent literature to determine whether the invention has ever before been described. Although a novice searcher may miss important patent information when searching, the best defense against these mistakes is practice, patience and the development of one's search skills.

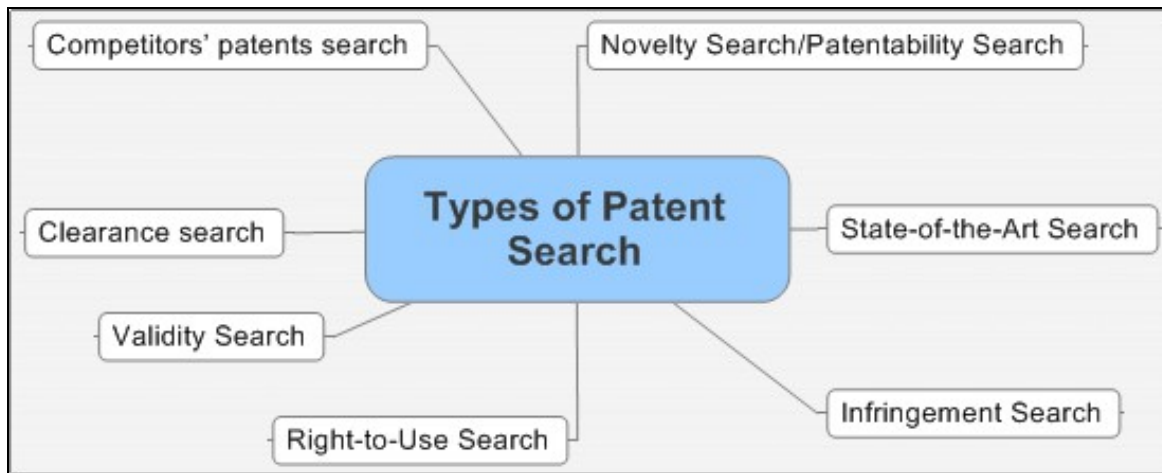
### Why Search Patents?

People search patents for many reasons, most often because they have an invention they hope to patent. A search will determine whether an invention has patenting potential. Others search patents to find alternative approaches and suggestions to help resolve technological problems. Studies have shown that 80% of all patents hold information that is not published anywhere else in the world. By tapping into this tremendous resource, the searcher avoids "reinventing the wheel".

- Getting a general idea of how an application and patent is structured to help in the preparation of your own application
- Learning more about a new field
- For market information
- Competitor tracking
- Technology tracking
- For R & D direction
- For identifying new patenting and research opportunities

### Types of Search

Details on various [search types](#)



### Where to Search?

Resources for patent searching are

- Patent Databases
  - ◆ Free databases
    - ◇ [List of all free databases](#)
    - ◇ [Patent Coverage](#)
  - ◆ [Vendor databases](#)
- Complete collection of patents on DVD-ROM
- Library

### How to Search?

Patent searching in USPTO

- [Click here to visit USTPO](#)
- Follow pasted slides to learn how to search on USPTO issued patents
- Search techniques and interface is same for both Issued Patents and Published Applications in USPTO

Example of Quick Search in USPTO

Welcome to the only official Website of the

Site Overview - New Users Go Search Go

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**USPTO Report Finds That Inadvertent Filesharing Threatens Personal, Government and Corporate Data**  
Users May Be Unaware of Threats from Filesharing Programs

The Department of Commerce's United States Patent and Trademark Office (USPTO) has released a report that concludes that the distributors of five popular filesharing programs repeatedly deployed features that they knew or should have known could cause users to share files inadvertently. The report, *Filesharing Programs and "Technological Features to Induce Users to Share,"* identifies five features in recent versions of five popular filesharing programs that could cause users to inadvertently distribute to others downloaded files or their own proprietary or sensitive files.

"Computer programs that can cause unintended filesharing contribute to copyright infringement, and they threaten the security of personal, corporate, and governmental data," noted Jon Dudas, under secretary of commerce for intellectual property—the Bush Administration's point person on copyright policy.

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**Main page of USPTO**  
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of patent applications  
FINAL DISPOSITION WITHIN 12 MONTHS



<p><b>Issued Patents (PatFT)</b> (full-text since 1976, full-page images since 1790)</p> <ul style="list-style-type: none"> <li><a href="#">Quick Search</a></li> <li><a href="#">Advanced Search</a></li> <li><a href="#">Patent Number Search</a></li> <li> </li> <li><a href="#">View Patent Full-Page Images</a> <small>How to View Patent Images</small></li> <li> </li> <li><a href="#">Status &amp; Event History</a></li> <li><a href="#">Database Contents</a></li> <li><a href="#">Help Files</a></li> </ul>	<p><b>Published Applications (AppFT)</b> (published since 15 March 2001)</p> <ul style="list-style-type: none"> <li><a href="#">Quick Search</a></li> <li><a href="#">Advanced Search</a></li> <li><a href="#">Publication Number Search</a></li> <li> </li> <li><a href="#">View Publication Full-Page Images</a> <small>How to View Published Application Images</small></li> <li> </li> <li><a href="#">Status &amp; Event History</a></li> <li><a href="#">Help Files</a></li> </ul>
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**Method of searching in Issued Patent database & Published Application database is same**



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Term 1:  in Field 1: All Fields

Term 2:  AND All Fields

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 1976 to present [full-text] | 
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When searching for specific number in the Patent Number, Patent Date, Patent Number, and Current US Classification must be seven characters in length, excluding commas, which are optional

Logical operator - Combines search terms

- AND
- OR
- ANDNOT

Search field options

- All Fields
- Title
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- Patent Number
- Application Date
- Application Serial Number
- Application Type
- Assignee Name
- Assignee City
- Assignee State
- Assignee Country
- International Classification
- Current US Classification
- Primary Examiner
- Assistant Examiner
- Inventor Name
- Inventor City
- Inventor State
- Inventor Country

**Search term option**

**Search duration option**



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AND

Term 2:  in Field 2:

Select years [\[Help\]](#)

Patents from 1790 through 1975 are searchable only by Issue Date, Patent Number, and Current US Classification. When searching for specific numbers in the Patent Number field, patent numbers must be seven characters in length, excluding commas, which are optional.

**Logic**  
 (Term1 AND Term2) = Mobile AND Antenna  
 Search Scope - Title

Searching US Patent Collection...

Results of Search in US Patent Collection db for: **TTL/Mobile AND TTL/Antenna: 346 patents.** Total # of hits

Hits 1 through 50 out of 346 Display limit

Next 50 Hits

Next display list option

Jump To

Jump to specific # option

Logic refine option

Refine Search

TTL = Search field option selected previously  
 Mobile, Antenna = Search terms  
 AND = Logical operator

PAT. NO.	Title
1 7,187,332	Mobile wireless communications device with human interface diversity antenna and related methods
2 7,183,986	Device and method for improving a radiation pattern of a mobile wireless terminal with a built-in antenna
3 7,177,667	Antenna remote control apparatus of mobile communication base station system
4 7,177,342	Apparatus and method for transmission beam forming of antenna array in a mobile communication system
5 7,170,464	Integrated mobile communication antenna
6 7 167 130	Internal antenna and flat panel sneaker assemblies and mobile terminals including the same

Search results display - Display limit is 50 patents/page

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Displaying  
1. Title  
2. Abstract

Displaying  
1. Patent number  
2. Publication date

United States Patent  
Kezys, et al.

7,187,332  
March 6, 2007

Mobile wireless communications device with human interface diversity antenna and related methods

### Abstract

A mobile wireless communications device may include a portable handheld housing, and a wireless transceiver carried by the housing. A pair of antennas are positioned in side-by-side relation preferably in the upper portion of the portable handheld housing. A human interface diversity controller is connected to the wireless transceiver to preferentially operate with the plurality of antennas based upon a relative position of the portable handheld housing with respect to a hand of a human user. The device can select or weight the antennas based upon the position of the device when being held by a user.

Inventors: Kezys; Vytautas (Ancaster, CA); Qi; Yihong (Waterloo, CA)  
Assignee: Research in Motion Limited (Ontario, CA)  
Appl. No.: 11/067,935  
Filed: February 28, 2005

Displaying  
1. Inventor name  
2. Assignee name  
3. Application number  
4. Date of filing

Note: This is a partial view of full text patent, only bibliographic data selected for displayed

## Example - Advance Search In USPTO

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Text box for multiple term search, multiple logical operator search strategy

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Examples:  
 ttl/(tennis and (racquet or racket))  
 isd/1/8/2002 and motorcycle  
 in/newmar-julie

Select Years [\[Help\]](#)

1976 to present [full-text]

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Field Code	Field Name	Field Code	Field Name
PN	<a href="#">Patent Number</a>	IN	<a href="#">Inventor Name</a>
ISD	<a href="#">Issue Date</a>	IC	<a href="#">Inventor City</a>
TTL	<a href="#">Title</a>	IS	<a href="#">Inventor State</a>
ABST	<a href="#">Abstract</a>	ICN	<a href="#">Inventor Country</a>

Table of abbreviations that can be used during search, partially displayed here

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((Mobile OR Cellular OR Cell) AND (Phone) AND (Multi-band OR Dual-band OR Two-Band Or 2-band) AND(Antenna OR Aerial) AND (band))

Example of search with AND OR operator in multiple field simultaneously with filed restriction by issue date (isd/) & inventor name (in/)

Examples:  
 ttl/(tennis and (racquet or racket))  
 isd/1/8/2002 and motorcycle  
 in/newmar-julie

1 1976 to present [full-text]

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ISD	<a href="#">Issue Date</a>	IC	<a href="#">Inventor City</a>
TTL	<a href="#">Title</a>	IS	<a href="#">Inventor State</a>
ABST	<a href="#">Abstract</a>	ICN	<a href="#">Inventor Country</a>

Logic

1. Term 1 with synonyms connected with OR operator
2. Further Term 2 Term 3 Term 4 connect with each other through AND operator
3. This is a example of full text patent search not restricted by any field

Searching US Patent Collection...

Results of Search in US Patent Collection db for:  
 (((((Mobile OR Cellular) OR Cell) AND Phone) AND ((Multi-band OR Dual-band) OR Two-Band) OR 2-band)) AND (Antenna OR Aerial)) AND band): 562 patents.  
 Hits 1 through 50 out of 562

Hit count display

System generated logic display

Next 50 Hits

Jump To

Logic refine option

Refine Search ((Mobile OR Cellular OR Cell) AND (Phone) AND (Multi-band OR Dual-band) OR Two-Band) OR 2-band)) AND (Antenna OR Aerial)) AND band)

PAT. NO.	Title
1 7,188,185	<a href="#">Federated multiprotocol communication</a>
2 7,187,959	<a href="#">Antenna structure for devices with conductive chassis</a>
3 7,187,945	<a href="#">Versatile antenna switch architecture</a>
4 7,187,910	<a href="#">Directional coupler and dual-band transmitter using the same</a>
5 7,187,663	<a href="#">Flexible processing system</a>
6 7,187,338	<a href="#">Antenna arrangement and module including the arrangement</a>
7 7,187,331	<a href="#">Embedded multiband antennas</a>

Hit display with title and patent number

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Utility -- 5,146,634 6923014 0000001

Design -- D339,456 D321987 D000152

Plant -- PP08,901 PP07514 PP00003

Reissue -- RE35,312 RE12345 RE00007

Defensive Publication -- T109,201 T855019 T100001

Statutory Invention Registration -- H001,523 H001234 H000001

Re-examination -- RX29,194 RE29183 RE00125

Additional Improvement -- AI00,002 AI000318 AI00007

Example of various patent number input format

**Note:**

1. Do not include US before patent #
2. Only US patents searchable here

