# **Basics of Patent Protection**

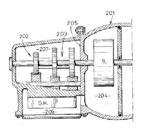
Sue A. Purvis
Innovation and Outreach Coordinator
New York City Region

### **Outline**

- Overview of Intellectual Property
- What is a Patent?
- Why get a Patent?
- Who can file for a Patent?
- Types of Patents
- Requirements for Patentability
- How is a Patent granted?
- How long does it take to get a Patent in the United States?
- Patenting Considerations
- Trade Secret vs. Patent

# Overview of Intellectual Property

	What's Protected?	Examples	Protection Lasts for:
Utility Patent	Inventions	iPod, chemical fertilizer, process of manipulating genetic traits in mice	20 years from the date of filing regular patent application
Design Patent	Ornamental (non functional) designs	Unique shape of electric guitar, design for a lamp	14 years
Copyright	Books, photos, music, fine art, graphic images, videos, films, architecture, computer programs	Michael Jackson's Thriller (music, artwork and video), Windows operating system	The life of the author plus 70 years (or for some works, 95 years from first publication)
Trade Secret	Formulas, methods, devices or compilations of information which is confidential and gives a business an advantage	Coca-Cola formula, survey methods used by a pollster, new invention for which patent application has not been filed	As long as information remains confidential and functions as a trade secret
Trademark	Words, symbols, logos, designs, or slogans that identify and distinguish products or services	Coca-Cola name and distinctive logo, Pillsbury doughboy character	As long as business continuously uses trademark in connection with goods or services











## Some IP found in a mobile phone

#### **Trademarks:**

- Made by "Nokia"
- Product "N95"
- Software "Symbian", "Java"

#### Patents:

- Data-processing methods
- Semiconductor circuits
- Chemical compounds
- Battery/Power Control
- Antenna

#### Copyrights:

- Software code
- Instruction manual
- Ringtone

• . . .



#### Trade secrets:

• ???

#### Designs (some of them registered):

- Form of overall phone
- Arrangement of buttons in oval shape
- Three-dimensional wave form of buttons
- Sliding screen

### What is a Patent?

- A Property Right
  - Right to <u>exclude others</u> from making, using, selling, offering for sale or importing the claimed invention
  - Limited term
  - Territorial: protection only in territory that granted patent; NO world-wide patent

# Quid Pro Quo

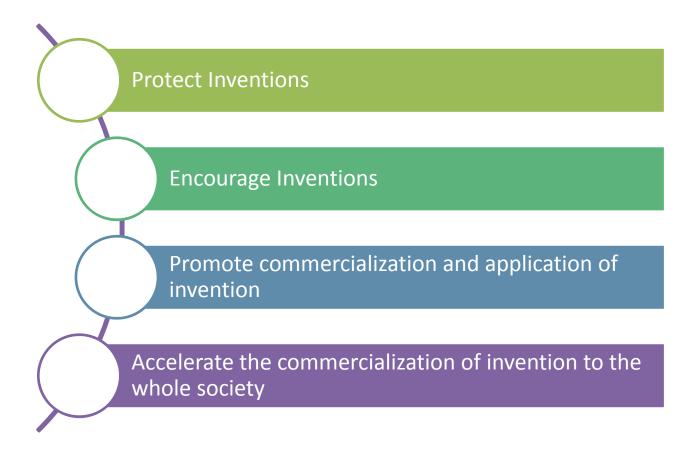


Time-Limited Monopoly

**Discloses Invention** 



# Role of the Patent System



### First U.S. Patent

X000001 July 31, 1790

The United States

To all towhom these Chesents shall come. Justing.

Patent No x-1 (July 31, 1790)

Whereas damed Kopkins of the bity of Philadelphia and State of Pensylvania hath discovered an Improvement, not known or used beforem such Discovery, in the making of Pearlash 1st by burning the row Ashes in a Furnace, 2st by diffoling and boiling them when so burnt in Water, 3st by drawing off and settling the day, and Ist by boiling the buy into Salts which then are the true Parlash; and also in the making of Pot ash by fluxing the Pearlash so made as a foresaid; which Operations burning the peace Ashes in a Furnace, preparating to their Diffoliation and boiling in Water, is new, heaves little Reviduum; and produces a much gent or Quantity of Salt: These are therefore in pursuance of the Act, entitied "An Act to promote the Progress of useful Arts", to grant to the said Jamuel Mophins, his Huns, administrators and a frights, for the Term of fourtern Hears, this sole and exclusive Right and Liberty of using and vending to thee still Discovery, of burning they aw Ashes previous to their being differed and boiled in Water, according to the true Internal meaning, of the Act aforesaid. In Its irrory where I shave caused these Sellers to be made patint, and the deal of the United States to be heavents affected. Given undernythand at the City of New York this thirty first Day of Sely in the Year of our Lord one thousand seven hundred Winter.

Edm: Kandolph Attorny General for the United Heater .

City of New York July 31 th 1790. \_

I do hereby bestify that the foregoing abiture patent were delivered tome in pursuance of the Act, entitules "An Act to promote the Progress of useful Arts," that I have examined the same, and find them conformable to the said Net.

**Signed by George Washington** 

Washington

# Why Get a Patent?

- A patent can be
  - Used to gain entry to a market
  - Used to exclude others from a market
  - Used as a marketing tool to promote unique aspects of a product
  - Sold or licensed, like other property

### Who Can File for a Patent?

- Anyone...from anywhere may apply, with only one exception:
  - Officers and employees of the USPTO 35 U.S.C. §4 - Restrictions on officers and employees as to interest in patents Officers and employees of the Patent and Trademark Office shall be incapable, during the period of their appointments and for one year thereafter, of applying for a patent and of acquiring, directly or indirectly, except by inheritance or bequest, any patent or any right or interest in any patent, issued or to be issued by the Office...
- An assignee, a person to whom the inventor is under an obligation to assign, or a person who otherwise shows sufficient proprietary interest

# Basis for Protection of Patents and Copyright in the U.S.

### US Constitution, Article 1, Section 8, Clause 8

-"Congress shall have the power ... to promote the progress of science and useful arts, by securing for limited

times to authors and inventors the exclusive right to their respective writings and discoveries."



#### Overview of Patent Law

#### Sources of Law

- Statutory
  - 35 U.S.C. (Patent Code)
- Rules: 37 C.F.R. (Patent Regulations)
  - Rules governing the operation of the USPTO; may be changed by the USPTO following the proper procedure
- Case Law
  - The United States has a common law system
  - Court cases shape the interpretation of laws

# Types of U.S. Patents

- Utility How an invention works
  - Inventions
  - Functionality
  - 20 year term from filing date
- Design How it looks
  - ornamental design described & shown
  - 14 year term from grant date
- Plant new variety of asexually reproduced plant.
  - 20 year term from filing date

# **Utility Patent**



#### (12) United States Patent Momose

- (54) INFORMATION PROCESSING PROGRAM AND INFORMATION PROCESSING APPARATUS
- (75) Inventor: Hiroshi Momose, Kyoto (JP)
- (73) Assignee: Nintendo Co., Ltd., Kyoto (JP)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 237 days.
- (21) Appl. No.: 12/078,896
- Apr. 8, 2008
- Prior Publication Data

US 2009/0055614 Al Feb. 26, 2009

Foreign Application Priority Data

Aug. 24, 2007 (JP) .

- (51) Int. Cl. (2006.01) G06F 3/00 G06F 1/00
- 710/5: 710/17: 710/24: 345/522: (52) U.S. Cl. .. 345/531; 345/532; 712/214
- Field of Classification Search ..... See application file for complete search history.

#### References Cited

U.S. PATENT DOCUMENTS

(10) Patent No.:	US 8,151,007 B
(45) Date of Patent:	Apr. 3, 201

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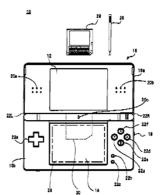
Primary Examiner - Eron J Sorrell Assistant Examiner — Dean Phan

(74) Attorney, Agent, or Firm - Nixon & Vanderhye P.C.

#### ABSTRACT

A computer of an information processing apparatus repeatedly accepts an operation to designate at least one of a plurality of command elements making up of a command, executes at least any one of a first memory writing processing to write a first command element having a specific attribute out of the command elements corresponding to the accepted operation in a first memory and a second memory writing processing to write a second command element having an attribute different from the attribute in a second memory, determines whether or not a command element array stored over the first memory and the second memory satisfies an execution allowable condition every execution of the writing processing, and processes information according to the command element array when the satisfaction is determined.

#### 16 Claims, 17 Drawing Sheets





(12) United States Patent Gootrad

(10) Patent No.: US 6,237,152 B1 (45) Date of Patent: May 29, 2001

#### (54) POCKETED WATERPROOF GARMENT AND A METHOD FOR PROVIDING SAME

- (76) Inventor: Kevin Gootrad, Dearborn Station, #356, 47 W. Polk St., Chicago, IL (US)
- Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
- (21) Appl. No.: 09/318,413

(22) Filed: May 25, 1999

- (51) Int. Cl.7 ..... .. A41D 3/04 ..... 2/87; 2/67; 2/77; 2/82; 2/94; 2/108; 2/125; 2/250 (52) U.S. Cl. .....
- (58) Field of Search

#### (56)References Cited

#### U.S. PATENT DOCUMENTS

2,428,477 * 10/1947 T 2,519,126 * 8/1950 F 2,544,840 * 3/1951 F 2,709,815 * 6/1955 P	iammer hompson alk cowatsch velson vans et al.	2/69.5 2/69.5 2/69.5 2/69.5
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			Fox	
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			Alimann	
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6,049,913	٠	4/2000	Herrigan, Jr	2/227

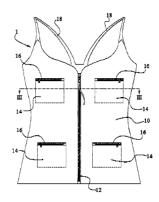
\* cited by examiner

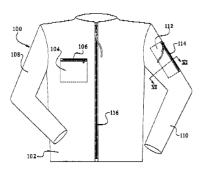
Primary Examiner-John J. Calvert Assistant Examiner-Katherine Moran (74) Attorney, Agent, or Firm-Patents +TMS

#### ABSTRACT

A garment is provided having at least one pocket that is attached to the garment and accessible via a zipper or other fastener that provides access to an interior compartment formed by the pocket as well as a method for providing a garment with a waterproof compartment. The fastener is preferably a waterproof zipper that is attachable via a process requiring the pocket and the zipper to be attached by gluing, stitching and/or heat-sealing the same. As a result, a completely watertight and waterproof pocket is formed allowing the user of the garment to carry items therein that typically may not be exposed to water.

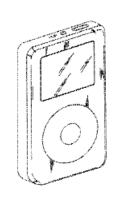
#### 22 Claims, 3 Drawing Sheets

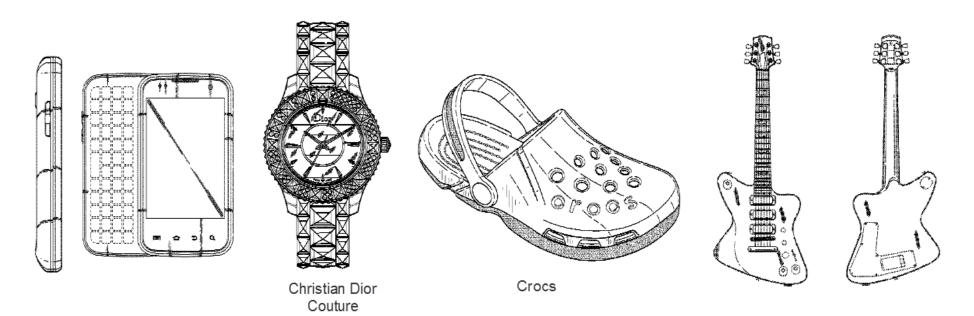




# Design Patent

- Protects the way an article looks, including
  - its shape and configuration, as well as
  - surface ornamentation applied to the article





# Plant Patent PP20,900





(10) Patent No.:

US PP20,900 P2

(45) Date of Patent:

Mar. 30, 2010

- (54) PIN OAK TREE NAMED 'PWJR08'
- (50) Latin Name: Quercus palustris Varietal Denomination: PWJR08
- (76) Inventors: Joseph C. Kelly, 6511 NE. 41<sup>st</sup> St., Redmond, OR (US) 97756; Peter J. Brentano, 5009 Davidson Rd. NE., St.

Paul, OR (US) 97137

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

(21) Appl. No.: 12/315,680

(22) Filed: Dec. 4, 2008

- (51) Int. Cl. A01H 5/00 (2006.01)
- (52) U.S. Cl. ..... Plt./225
- (58) Field of Classification Search ...................... Plt/225 See application file for complete search history.

Primary Examiner—Susan B McCormick Ewoldt (74) Attorney, Agent, or Firm—Klarquist Sparkman, LLP

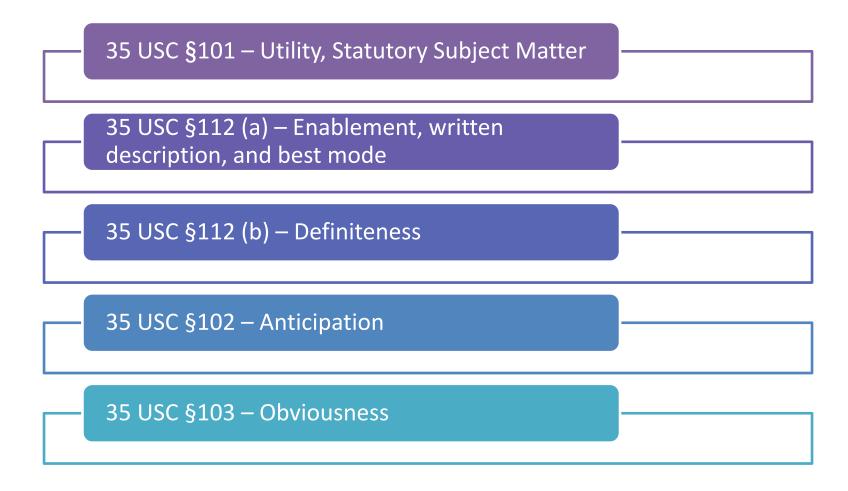
(57) ABSTRACT

A new variety of *Quercus palustris* Pin Oak tree substantially as herein shown and described, characterized particularly by a combination of glossy foliage, new growth leaves that are pubescent, upright growth habit and orange-red Fall color.

8 Drawing Sheets



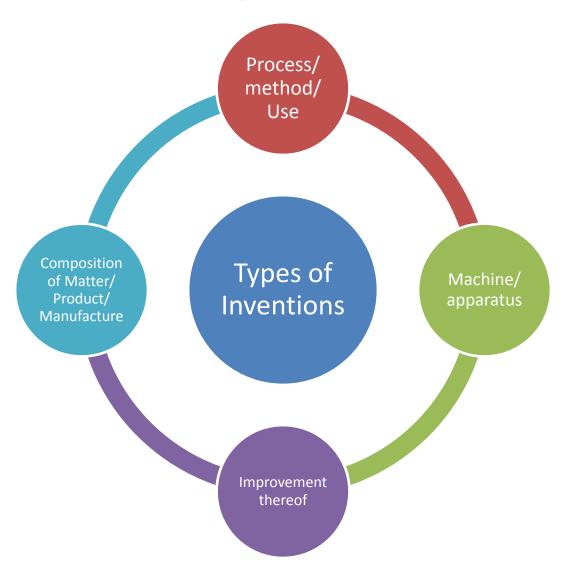
# Requirements for Patentability



### 35 U.S.C. 101

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title."

# **Utility Patents**



# 35 U.S.C. 112 (a)

- The specification shall contain
  - a written description of the invention, and of
  - the manner and process of making and using it,
  - in such full, clear, concise, and exact terms as to enable any person skilled in the art
    - to which it pertains, or with which it is most nearly connected,
    - to make and use the same,
  - and shall set forth the best mode
    - contemplated by the inventor of carrying out his invention

# 35 U.S.C. 112 (b)

- The specification shall conclude with
  - one or more claims
    - particularly pointing out and
    - distinctly claiming
    - the subject matter which the applicant regards as his invention

### 35 U.S.C. 102

- 35 U.S.C. 102 an invention must be new
  - An invention lacks novelty (i.e., is "anticipated") only if
    - each and every element as set forth in the claim is found,
    - either expressly or inherently,
    - in a single prior art reference
  - Reference must teach every aspect of the claimed invention either explicitly or impliedly
    - Any feature not directly taught must be inherently present

### 35 U.S.C. 103

- 35 U.S.C. 103 an invention must be non-obvious
  - More than a mere obvious modification of the prior art
  - Reference teachings must somehow be modified to meet the claims
    - Modification must be one which would have been obvious to one of ordinary skill in the art at the time the invention was made
  - The teachings of multiple references may be combined under § 103

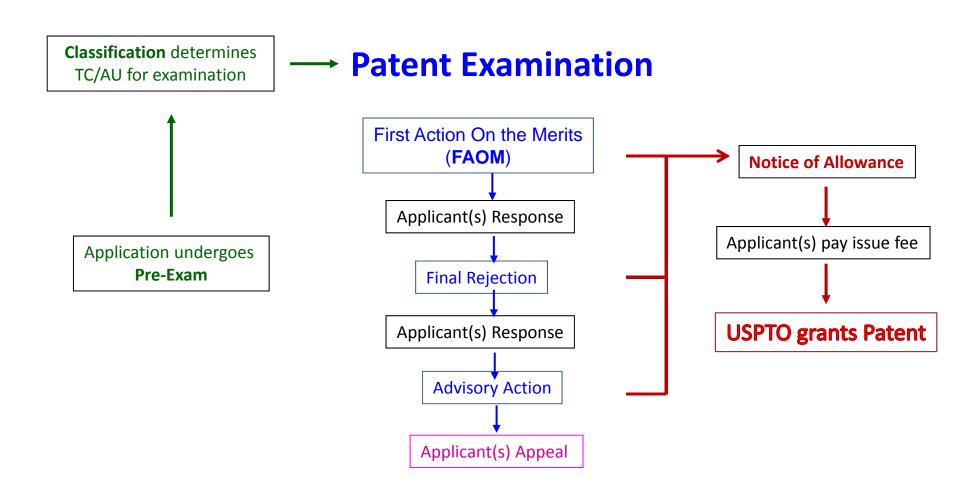
### It's all about the claims!

- Protection is limited to what is claimed
- During prosecution, claims are searched, may be rejected, amended, and allowed
- Specification may include numerous embodiments and elements
  - but only subject matter claimed is afforded protection
- Examiner works with the Applicant to focus the claims on novel aspects of the invention
- Broadest reasonable interpretation during examination
  - Search of invention may extend to unrelated areas

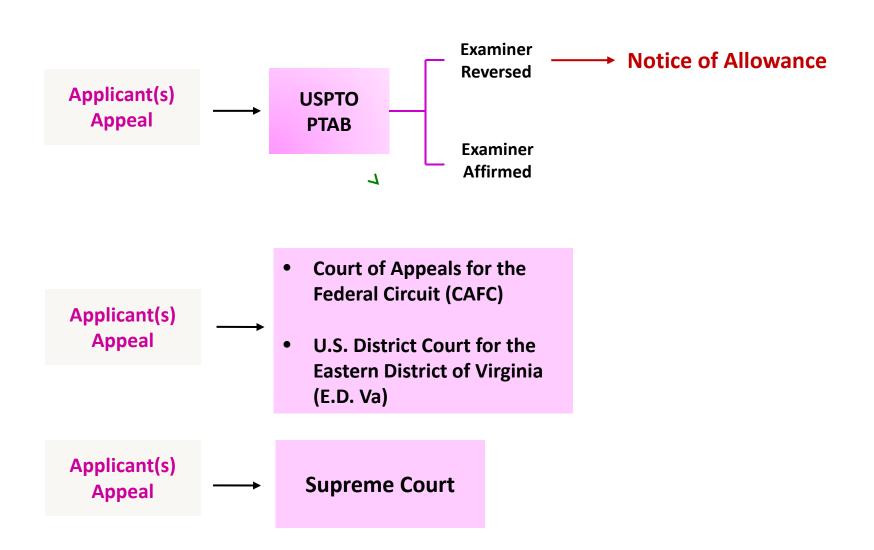
### 37 CFR 1.77(a): Elements of an Application

- 1. Utility application transmittal form.
- 2. Fee transmittal form.
- 3. Application data sheet bibliographic information.
- 4. Specification.
  - --Abstract, title, cross-references to related applications, background of invention, summary of invention, brief description of drawings, detailed description, claims, etc.
- 5. Drawings (if necessary).
- 6. Executed oath or declaration.

# Flowchart of Patent Examination and Appeal System (I) Patent Examination



# Flowchart of Patent Examination and Appeal System, cont. (II) Appeal Process



#### Patent Examination

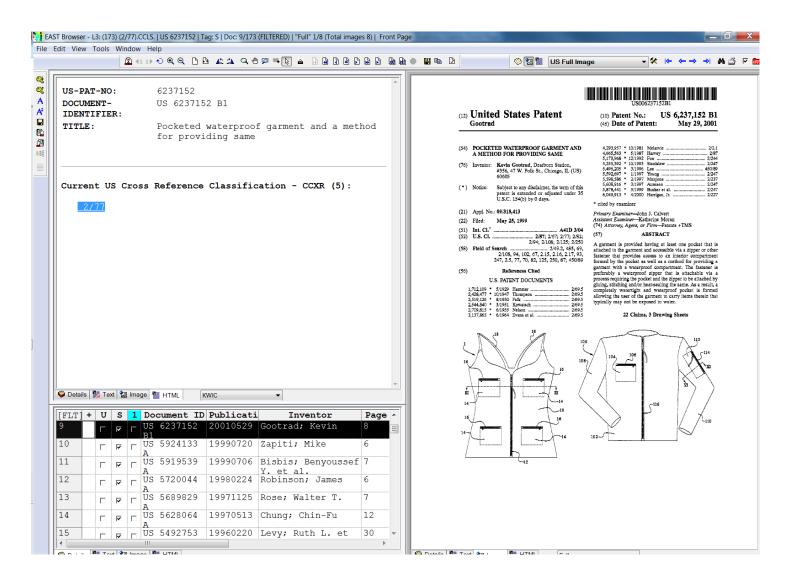
- Patent Examiner reviews contents of the application for compliance with all U.S. legal requirements
- Burden is on the examiner: An applicant is entitled to a patent unless...
  - Requirements of U.S. Law are not met

# Prior Art - 35 U.S.C. 102 & 35 U.S.C. 103

#### Prior Art

- Any information available for consideration when determining whether an invention is patentable
- Public information
  - Patents, publications, articles, products, information on the internet, etc.
  - Printed publications U.S. or foreign
- Information available/dated before the filing date of application being examined

# Examiners search the prior art



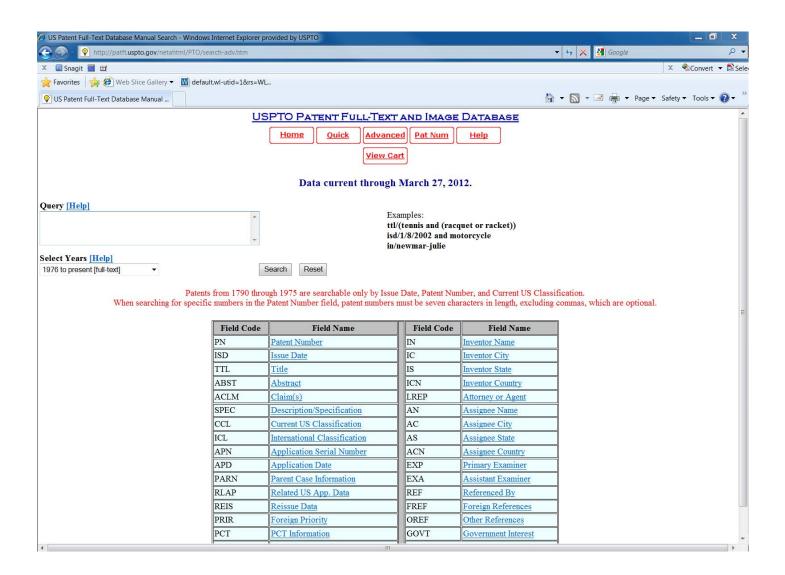
## Other Types of Prior Art in the U.S.

- Prior sales or public use in the United States
  - If the U.S./foreign patent/publication or public use/sale in the U.S. is more than one year before the effective filing date
    - Applicant is barred from obtaining a patent
- AIA Changes to Prior Art (March 16, 2013)
  - Prior public use or sale anywhere in the world qualifies as prior art

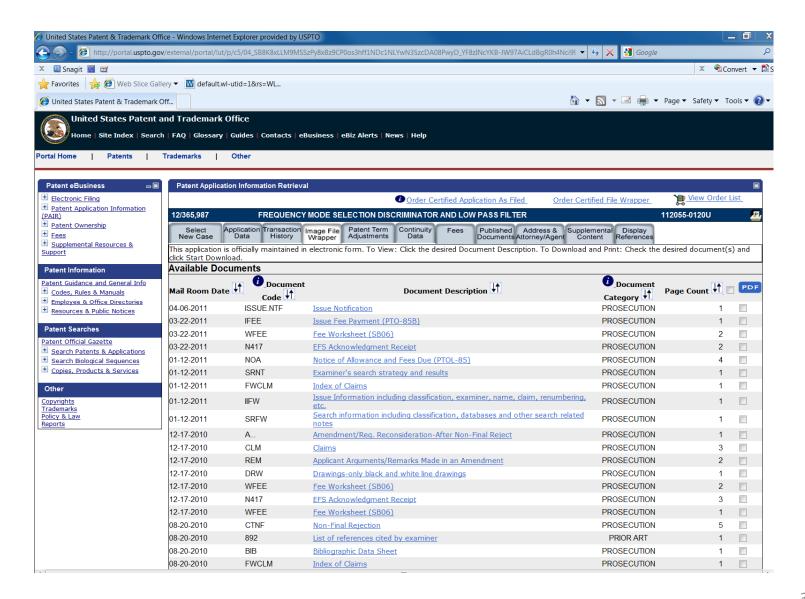
### **Grace Periods**

- Time prior to filing during which public disclosure by an inventor will not be considered prior art
- Differs in different jurisdictions.
  - U.S.: 1 year grace period (35 U.S.C. 102(b))
  - EU: No grace period.
  - JPO: 6-month grace period, under certain circumstances

# Public Search Page



### **Public PAIR**



# How long does the process take?

- Utility Patents
  - 18.7 months avg. for a first office action
  - 30.6 months avg. for total pendency
- Design Patents
  - 13 months avg. for total pendency
- Time can vary depending on the technology and amount of prosecution
  - 597,318 application backlog
- 7,734 Patent Examiners

(May 2013 statistics)

### Where to Patent?

- Patent protection can be an important part of overall business strategy in global marketplace
- Patent rights are territorial
  - Protection against infringing activities
    - Only within the country or region in which patent was granted
- NO world-wide patent
  - Must apply for and be granted a patent in each country or region of interest

# Patenting Considerations

- Conduct cost/benefit analysis
  - Consider the shelf life of a product, e.g., changes in technology, style
  - Consider how the patent will be used, e.g. licensing, to exclude competitors
  - Consider whether the product can be used outside your market
- Determine patentability
  - Searching yourself vs. engaging a professional searcher
- Choose right patent attorney/agent
- Preparation of a thorough and accurate application
- Are there workarounds for the invention?
- Costs Patents can be expensive.
  - Background work can help to keep attorney fees lower
  - Annuity & Maintenance fees

#### How much does it cost?

#### Fees

- USPTO Utility application
  - Filing fee
  - Search fee
  - Examination fee
  - Discount for small entities
  - Issue Fee
  - Maintenance Feesdue at 3 ½ , 7 ½ & 11 ½years

- Attorney fees
  - Hourly fees
  - Flat Rates
- Design Patents
  - No maintenance fees
  - ~2,000-\$3,000

Cost varies based on amount of prosecution. ~\$5,000-\$25,000

# **Provisional Patent Application**

- A low-cost way to establish an early effective filing date (priority date) in a non-provisional patent application with fewer formalities
  - Specification & Drawings
  - No claims required
- 12 month window to file a corresponding utility patent application in order to benefit from the priority date of the provisional application
  - Caution will lose priority date for any new matter filed in the utility application
- Provisional application is abandoned automatically at 12 months and is not examined

# Patent Infringement in the U.S.

Occurs when –

Without authorization of patent owner:

- Making or using the invention
- -Offer to sell or sells within the U.S.
- Import the invention into the U.S.
- Actively induce infringement by another

#### **Enforcement Considerations**

- Enforceability of patents
  - Effectiveness of enforcement laws and procedures in the country/region of interest
    - Some countries allow recordation of patent with customs
- Enforcement requires patent owner action
- Competitor products should be monitored
  - In stores
  - At trade shows
- Licensing may be beneficial
  - Limit as to time, geographical area, or field of use

### **Trade Secret Law**

- Protects a commercially valuable proprietary information
- Valuable business information that gives a <u>competitive</u> <u>advantage</u>
- Trade Secrets are not generally known and must be subject to reasonable efforts to preserve confidentiality
- Examples
  - Formulas (e.g. Coca-Cola®)
  - Manufacturing processes
  - Business strategies
  - Business management information
  - Customer lists
  - Design concepts

### Trade Secret vs. Patent

#### Trade Secret

- Indefinite
- Not registered or disclosed
- Can be separately discovered
- Remedy only if the secret is illegally appropriated

#### Patent

- 20 year term
- Public disclosure
- Right to exclude others
- Remedy for infringement

## Common Ways to Lose a Trade Secret

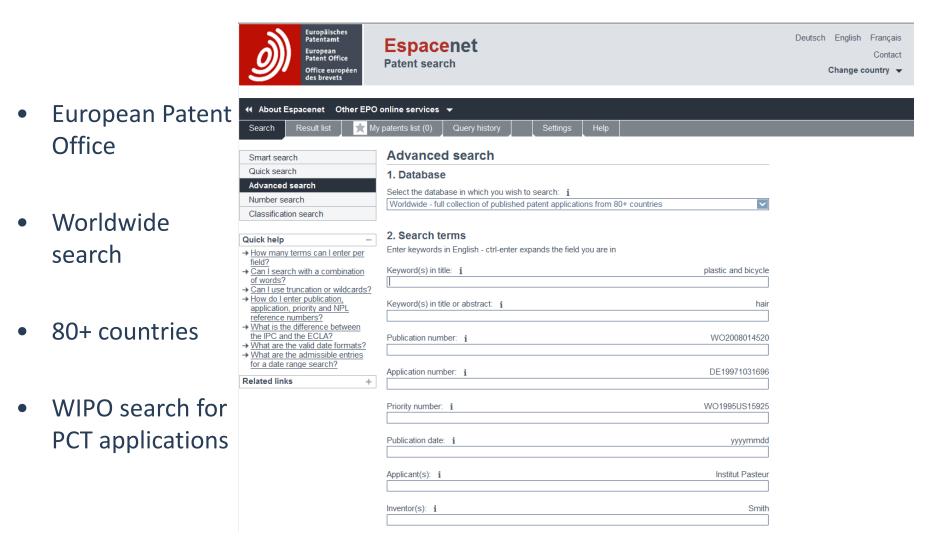
Owner or owner-authorized disclosure

Reverse engineering

Independent development

Failure to take adequate steps to prevent disclosure

# www.Espacenet.com



### Resources

- <a href="http://www.uspto.gov/inventors/index.jsp">http://www.uspto.gov/inventors/index.jsp</a>
   <a href="http://www.uspto.gov/inventors/index.jsp">Inventors Resources on PTO Internet site</a>
- http://patft.uspto.gov/
  - Searching US patents
- http://www.uspto.gov/patents/init\_events/pct/index.jsp
  - PCT Legal Web site
- http://www.StopFakes.gov
  - Protecting Intellectual Property Rights
- http://www.ustr.gov/trade-topics/intellectual-property
  - Office of US Trade Representative
- http://www.wipo.int
  - World Intellectual Property Organization
- http://www.espacenet.com/access/index.en.html
  - European patent database
- <a href="http://www.ipdl.ncipi.go.jp/homepg">http://www.ipdl.ncipi.go.jp/homepg</a> e.ipdl<a href="http://www.ipdl.ncipi.go.jp/homepg</a> e.ipdlJapanese patent database

# THANK YOU

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