Intellectual Property (IP) Overview for Information Professionals and Educators



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Information presented here should not be considered legal advice.

Proper legal consultation should be obtained when necessary for your specific and unique needs.

IP Topics Covered



- Librarians' and educators' intellectual property (IP) customers:
 - Creators (authors or inventors)
 - Consumers (customers or users)
- Intellectual Property (IP) defined
- Basic types of IP: copyrights, patents, trademarks
- IP information literacy and ties to the curriculum or outreach of library colleagues and customers
- Patent and trademark basics including searching introduction
- Best practices and associated IP topics: opportunities to extend IP awareness and information literacy for library customers

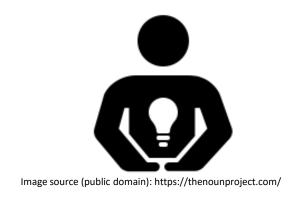


Creators and Consumers



- Librarians' and educators' intellectual property (IP) customers:
 - Creators (authors or inventors)
 - Consumers (customers or users)
- Creators (owners) rely on the defensive and financial aspects of IP.
- Creators (owners) of effective trademarks and/or patents are distinctive and often the first in their field or the competitive marketplace.
- Consumer rely on the creative output for availability, as well as fair use, 17 US Code, US Copyright Law, Section 107, for when they need to reuse copyrights for educational instruction, or freedom of expression.

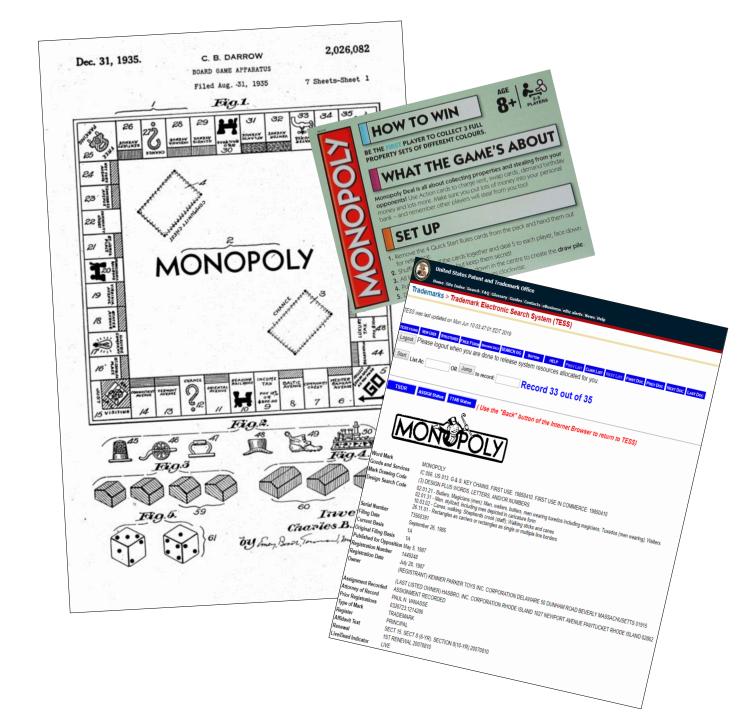
Intellectual Property Defined



• The World Health Organization defines IP as "the overall term for property in the creation of the mind, including inventions, literary and artistic works, but also images, and designs."

Intellectualopoly: Types of IP

- The ever popular Monopoly® board game is an example of something comprising all three primary intellectual properties:
- U.S. Utility Patent 2,026,082 issued in 1935, protected the functional invention of the game, since fallen into the public domain.
- Copyright still protects the expression of the published rules of the game and other creative expressions.
- Registered (R) federal trademarks are still active, including logos and game pieces.



"If you don't measure it, you can't manage it".

Intellectual Property Overview (Highlights)

	Copyright	Trademark	Patent	Trade Secret
Law Source	U.S. Copyright Act (Federal) Title 17 U.S. Code	Lanham Act (Federal) Title 15 U.S. Code; state statutes; and common law	U.S. Patent Act (Federal) Title 35 U.S. Code	State statutes (Uniform Trade Secrets Act); common law
Subject Matter (Protected)	Art, writings and other forms of expression; not facts or ideas	Words, symbols, logos, designs or slogans that identify and distinguish products or services	Utility Patent: inventions Design Patent: ornamental (non- functional) designs	Formula, device, pattern, program, technique, or process
Protection Standard	Originality; authorship; fixation in tangible medium	Distinctiveness; secondary meaning; use in commerce	Novelty; non- obviousness; and utility (ornamentally for design patents; distinctiveness for plants)	Commercial value; unknown or unavailable information; effort to maintain secret
Protection Scope	17 U.S. Code §106: rights of reproduction, distribution, performance, public display, and derivative works	15 U.S. Code §1051: rights in U.S.; likelihood of confusion; and §1125(a) false designation of origin §43(a), false description, dilution	35 U.S. Code §154: right to exclude others from making, using, offering for sale, or selling the invention	Defense against misappropriation: acquisition by improper means or disclosure without consent
Protection Duration	Life of author plus 70 years	Perpetual until abandonment or loss of distinctness or secondary meaning	Utility/Plant: 20 years Design: 15 years	Potentially protected forever until publicly disclosed
Rights of Others	Fair use; compulsory licensing (music); independent creation	Truthful communication; fair use and collateral use (commentary)	Unless licensed, none.	Independent discovery; reverse engineering
Examples	Harry Potter books, movies and music soundtrack recordings	Coca-Cola name, distinctive logo and trade dress of bottle shape	iPhone mobile device, both utility and design aspects	Coca-Cola formula and KFC secret recipe

Chart Source: Original content by John Schlipp

- IP Audit is a systematic review of IP assets owned, used, or acquired by a business.
- It uncovers under-utilized
 IP assets, identifies any threats to a
 company's bottom line, and enables
 business planners to devise informed
 strategies that will maintain and improve
 market position of a company.
- It identifies company strengths and weaknesses. Brings together different departments within an organization.
- Source: IP Audit "How to" Guide, by Ian Cockburn, WebEditor, Manager Advertising & Marketing at PIPERS - Global, A Patent attorney Firm with Offices in the United Kingdom, New Zealand, Australia, Singapore and Malaysia.
- www.wipo.int/sme/en/documents/ip audit fulltext.html

IP Information Literacy (IPIL)

- ACRL defines IL as a set of abilities requiring researchers "to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information."
- IL standards include multiple aspects of intellectual property, including copyright and patents.
- IPIL offers ties to the curriculum and/or outreach opportunities to our library colleagues and/or customers.
- Yet little has been published which ties IP to IL.



Proactive IL = IP Awareness



- Nicholas Joint, "Teaching Intellectual Property Rights as part of the Information Literacy Syllabus," Library Review 55.6 (2006): 330-336.
- Joint suggests that a proactive information literacy curriculum (including intellectual property awareness) is the best way of enhancing students' understanding of intellectual property issues (both creator and consumer rights' aspects).
- Janis Tyhurst, "Exploring the Need for Intellectual Property Literacy for Business and STEM Disciplines," in Information Literacy in the Workplace, 5th European Conference, ECIL 2017, January 2018: 257-266.
- Tyhurst expands on Joint's reference by promoting the larger realm of IP awareness beyond copyright and fair use, such as including patents.
- IPIL goes beyond college students and IP specialists. It also supports other users such as school children, teenagers, and the general public. Tyhurst also targets business and entrepreneurs as prospective users.

IP Information Literacy: Ethical and Legal Ties

- Before providing IPIL, one should be aware of the *Code of Ethics* published by the ALA, which advises librarians to clarify their role as information providers and not as interpreters of information when assisting customers with specialized information, such as health, patents, or other legal issues.
- Information Literacy Standards are often associated with IP awareness for school and college instruction.
- Such examples include the *Code of Ethics of the American Library Association*, the *Standards for the 21st-Century Learner* of the American Association of School Librarians (AASL), and the more recently published *Framework for Information Literacy for Higher Education* from the Association of College & Research Libraries (ACRL), *AASL Standards Framework for Learners* of the AASL, and others.

ACRL Framework for Information Literacy

- ACRL published a set of six frames for information literacy in higher education:
 - Authority Is Constructed and Contextual
 - Information Creation as a Process
 - Information Has Value
 - Research as Inquiry
 - Scholarship as Conversation
 - Searching as Strategic Exploration
- Academic librarians have developed learning outcomes, tools, and resources based upon these frames. Some have used these specific four frames to convey IP information literacy concepts and skills:
 - Information Has Value "As creators and users of information, experts understand their rights and responsibilities when participating in a community of scholarship."
 - Research as Inquiry "Learners...follow ethical and legal guidelines in gathering and using information."
 - Scholarship as Conversation "Learners...cite the contributing work of others."
 - Searching as Strategic Exploration Patents and patent information (covered next)

Frames tied to Patents



- The six frames tied to patents further reinforce the role of library research consultations and instruction of intellectual property information literacy.
- Searching as Strategic Exploration, demonstrating the intricate steps of how to search patents, fosters learners to develop their information literate abilities to:
 - Match information needs and search strategies to appropriate search tools;
 - Understand how information systems (i.e. collections of recorded information) are organized in order to access relevant information;
 - Use different types of searching language (e.g. controlled vocabulary, keywords, natural language) appropriately;
 - Manage searching processes and results effectively.
- Information Has Value applies to the economic value of patents to inventors and society.
- Role of patents in research and development for STEM disciplines fits well with the frames Research as Inquiry; Scholarship as Conversation; and Information Creation as a Process.
- Ultimately, as government documents, patents could be applied to discussion of the frame, Authority is Constructed and Contextual.
- For more, see Dave Zwicky, "Thoughts on Patents and Information Literacy," *Journal of the Patent and Trademark Resource Center Association*, Volume 29, March 1, 2019, Article 1.

Copy what?



Source: Jump Start by Robb Armstrong

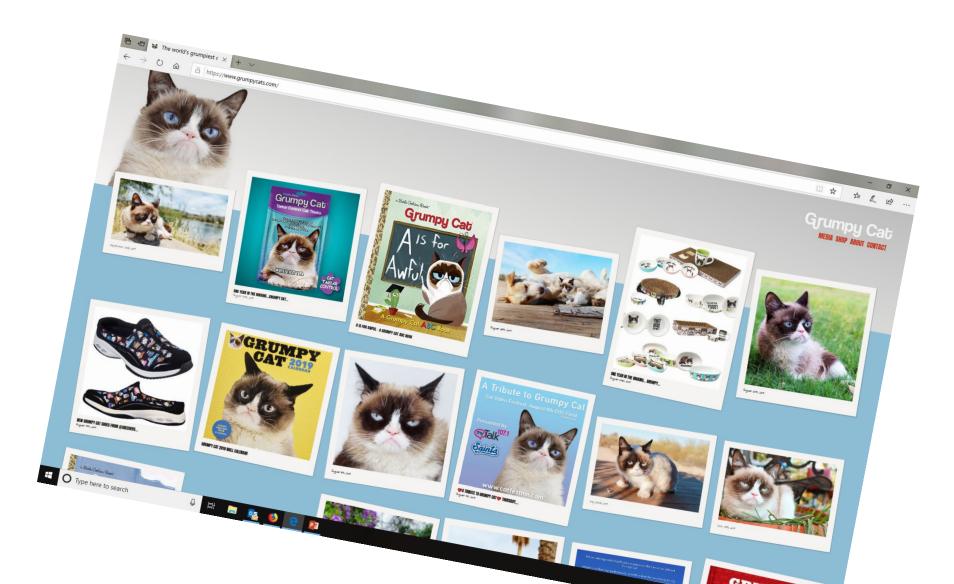
- Copyright is a form of protection provided by the laws of the United States (Title 17, U.S. Code) to the authors of "original works of authorship."
- In simple terms...the right to copy.

What may be copyrighted?



- Literary works
- Musical works and lyrics
- Dramatic works accompanying music
- Pantomimes and choreographic works
- Pictorial, graphic, and sculptural works
- Motion pictures, audiovisual works
- Sound recordings
- Architectural works

What could a Grump Cat® teach us about IP?



Catastrophic Copyright Case



Grumpy Cat is a highly successful enterprise of an internet-famous feline's scowling image, first posted on social media in 2012. The owners of the sourpuss sensation built an effective and robust IP strategy, capitalizing on the likeness of Grumpy Cat on T-shirts, coffee mugs, books, and calendars.

- The copyright owner of the popular cultural icon Grumpy Cat® won over \$700,000 from an infringing beverage maker selling an unlicensed coffee product, which exceeded the limits of its licensing agreement with Grumpy Cat's owner.
- A beverage maker was licensed by Grumpy Cat to sell a single product line of "Grumpy Cat Grumppucino" bottled iced coffees.
- The coffee producer later started selling other products, such as packaged Grumpy Cat Roasted Coffee and T-shirts, which went beyond the initial terms of the licensing agreement for Grumppucino bottled beverages.
- The sale of the packaged Roasted Coffee products and T-shirts by the beverage maker not only infringed on Grumpy Cat's copyrights and trademarks, but it also breached the terms of the license agreement.

Trademark Tizzy



sharing images and headlines of this news story mistakenly referred to Grumpy Cat's patents, which do not exist. The posts should have only referred to copyrights or trademarks.

- There were more trademark issues when Grumpy Cat also sued the beverage maker Grenade for cybersquatting, as it obtained the internet domain grumpycat.com, using its trademark without permission.
- The lesson learned from this situation sustains the two sides of IP. The **creator** of an IP, should register his or her IP rights to the creation as soon as possible to be ready to guard those rights ferociously. The other side of the equation is the **consumer or licensee** respecting those rights.
- Not only is it essential to get permission, but also to read the fine print of any contract carefully to avoid such consequences. Just because a popular name such as Grumpy Cat is reposted on social media does not mean it is available to commercialize without permission.

Patents & Trademarks



- PTRCs are a nationwide network of public, state, and academic libraries that are designated by the USPTO to disseminate patent and trademark information and to support the diverse IP needs of the public.
- By accessing the patent and trademark information at a PTRC, with instruction by a trained specialist, one is able to determine if someone else has already patented an invention or obtained a federal registration for a trademark on goods or services.
- There are over 80 PTRCs. These libraries are trained by the US Patent & Trademark Office to support other libraries and their patrons.



Trademarks vs. Patents



IMPORTANT DIFFERENCE: Unlike copyrights, federally registered trademarks or patents are subject to approval by the **US Patent & Trademark** Office before being granted.

- Trademarks are words, names, phrases, or symbols which identify and distinguish the business or provider of goods, services, or ideas.
- Trademarks registered with the USPTO are marked with an encircled letter "R," while those registered by a state government (or common law) are marked with a "TM" after the trademarked name or symbol, e.g. NKU Norse logo.
- Trademarks last forever as long as they are renewed and used in commerce.
- Patents are for inventions. Patent documents provide names of inventor/s, description of patented device or composition of matter and legal description of what's protected (claims). Often includes name of patent assignee (owner).
- <u>Claims are the heart of a patent</u>; they define exclusive rights, similar to how a real estate deed defines the dimensions of property.
- Life of a patent is limited to 15-20 years depending on the type.

Trademarks Are Not Monopolies





- Trademarks are **brand names or logos** that identify the producers of products or services in the marketplace, so that customers can find what they are looking for.
- Trademark law prevents your competitors from using a name or logo that would confuse customers to buy their product or service instead of yours.
- But a trademark is not a monopoly.
- A trademark is used in connection with a specific good or service.
 Different companies can use similar marks in connection with different goods or services.
- Source: Donna Ray Berkelhammer, "Trademarks Are Not Monopolies," LexisNexis.com: www.lexisnexis.com/legalnewsroom/intellectual-property/b/copyright-trademark-law-blog/posts/trademarks-are-not-monopolies

Common Grounds for Refusing Federal ® Registration

- Likelihood of Confusion is the primary obstacle when applying for a Federal registration of a trademark.
 - Marks are confusingly similar.
 - Goods or services are related.
- X-SEED for agriculture seeds versus EXCEED for live plants might be confusing for customers of such products.
- Meanwhile, Dove® soap should not be confused with Dove® chocolates.

Common Grounds for Refusing Federal (R) Registration



Descriptiveness



Strength of a mark determines its registrability and protectability:



- □Strong marks serve as unique identifiers of source and distinguish goods/services of one source from another
 - ☐ High probability of being registrable and protects against infringement
- Weak marks more commonly used by others to describe a characteristic or quality about the product/service itself not its source
 Low to zero probability of being registrable and/or protectable

Examples of Strong Marks



• FANCIFUL – Invented words







• ARBITRARY - Actual words but don't convey any association with the goods/services

Apple



*** BlackBerry

• **SUGGESTIVE** - Suggest a quality or an intended/desired effect of the goods/services

Ex. COPPERTONE for suntan lotion

EVEREADY for batteries

Examples of Weak Marks



- **DESCRIPTIVE** Words or designs that describe the goods or services
 - **URBANHOUZING** for real estate services **APPLE PIE** for potpourri
 - * Descriptive marks are less likely granted than distinctive marks
- GENERIC Common everyday names for goods or services
 - MILK for a dairy-based beverage
 - **LAWYERS.COM** for providing online databases featuring information about the field of law and legal services
 - * Generic marks are incapable of being source identifiers; not registrable

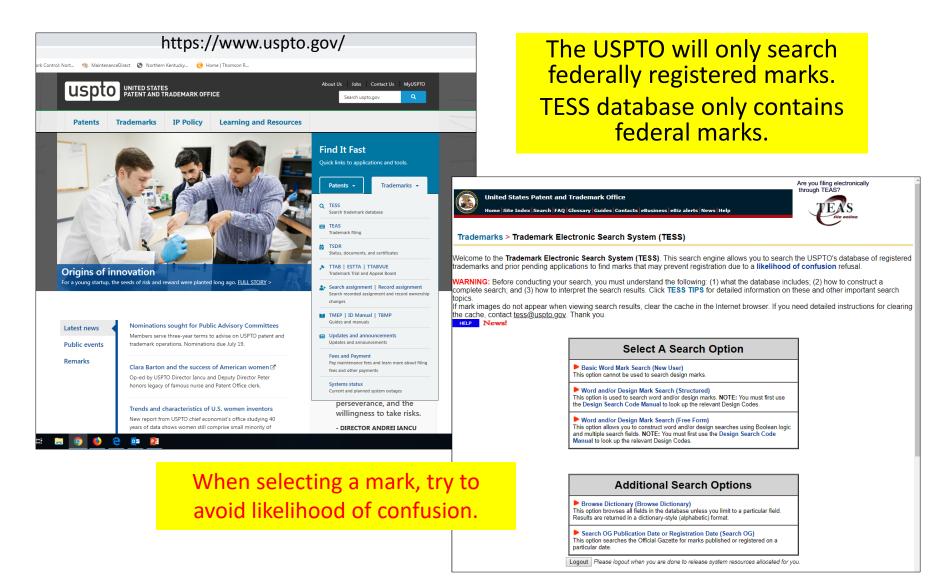


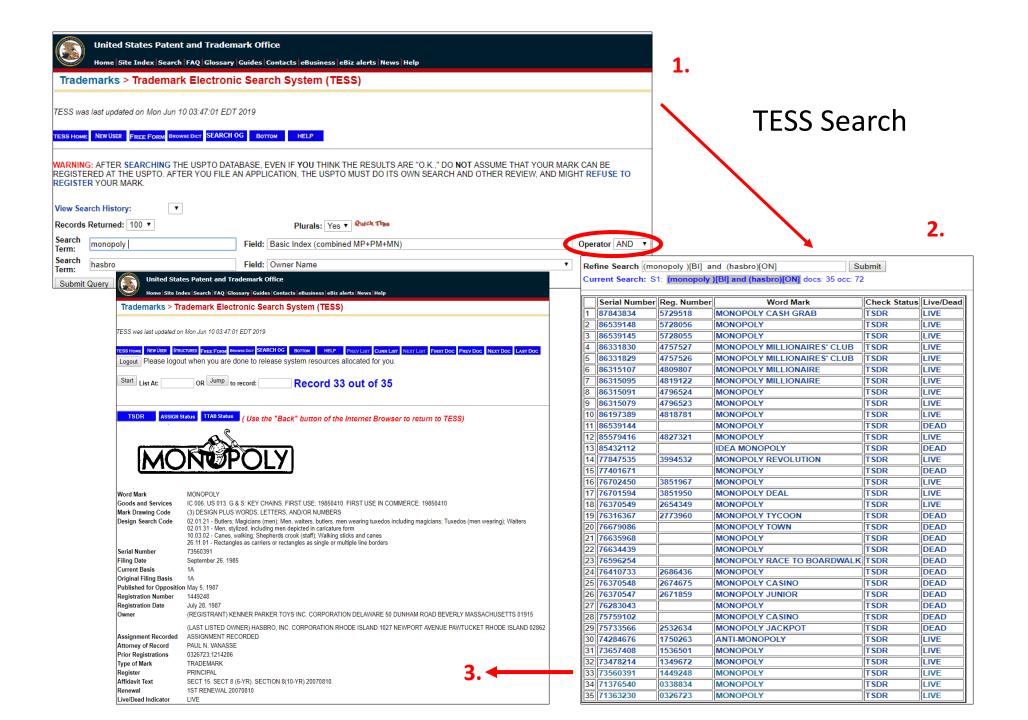
Additional Possible Grounds for Refusal

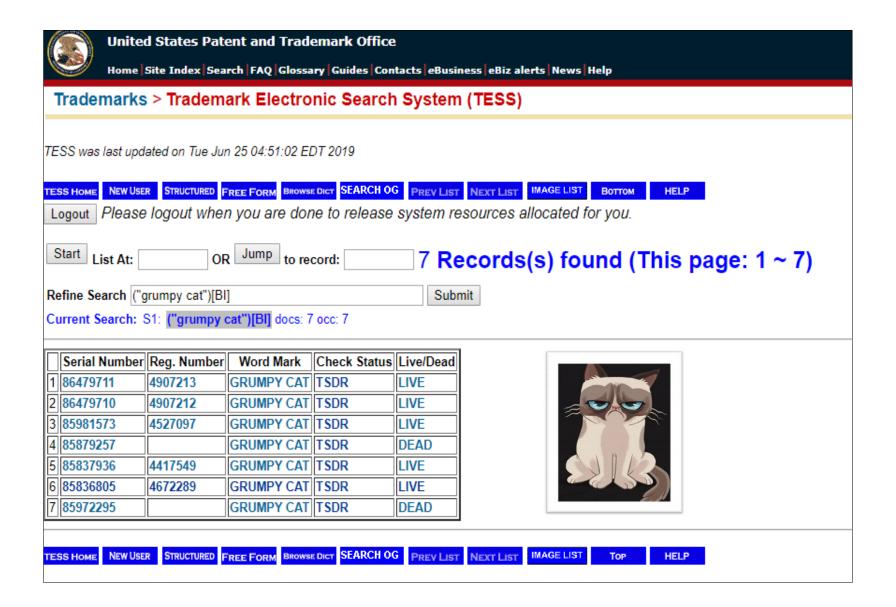


- Some marks when initially refused might eventually be registrable after providing evidence of a secondary meaning (acquired distinctiveness)
 - Surname i.e., MILLER LAW GROUP primarily a surname for legal services
 - Geographic i.e., DENVER WESTERNS for western-style shirts originating in Denver
- Some marks require consent in order to be registered
 - Name or portrait of a living individual
- Some marks are <u>completely barred</u> from registration
 - False connection
 - Deceptive
 - Generic

TESS Database Searching: Prospective Registration







For directions on searching trademarks in TESS,

see https://www.uspto.gov/learning-and-resources/support-centers/patent-and-trademark-resource-centers-ptrc/resources

Patents are limited-time Monopolies



A patent is a property right granted by the United States government to an inventor,

"to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States,"

for a <u>limited-time</u>, in exchange for public disclosure of the invention.

Patentability

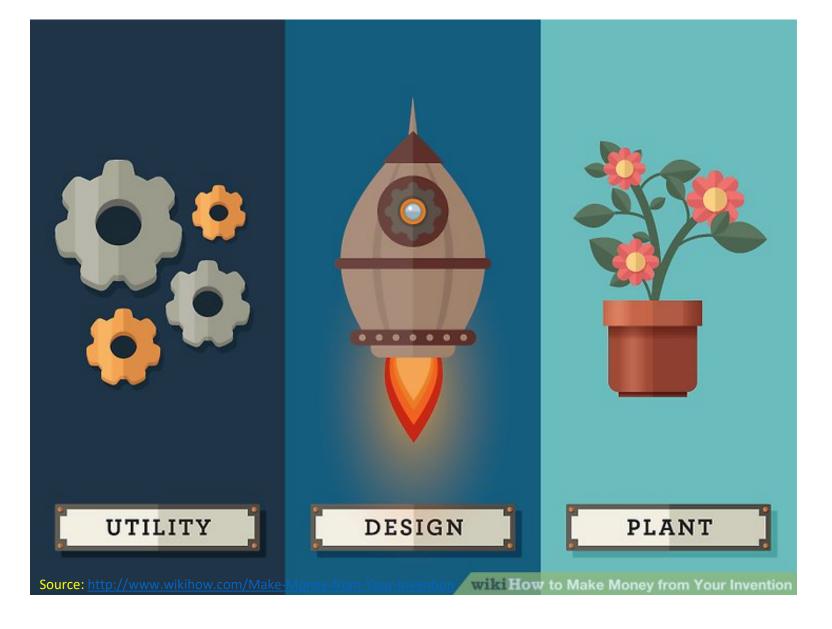


 Inventions that are new, useful, non-obvious, and accompanied by a written description disclosing how to make and use the invention may be patented.





Three Types of Patents



U.S. Patent Prior Art Search

In order to be sure that an invention is indeed novel and non-obvious, one conducts a prior art search before filing a U.S. patent application.

Many searchers start off with a preliminary prior art search of U.S. patents and published patent applications.

To be as thorough as possible, a preliminary prior art search is ideally a classification search of granted U.S. patents and published U.S. patent applications conducted to determine patentability of an invention.

It can be supplemented with a keyword search, though there are pitfalls from relying only on a keyword search.



What is Prior Art?

Prior art consists of information disclosed to the public including:

- U.S. Patents and published patent applications;
- Foreign Patents and published patent applications;
- Journal and magazine articles;
- Books, manuals, and catalogs;
- Websites;
- Conference proceedings;
- Scientific papers.



Which Databases to Search?



7-Step U.S. Patent Search Strategy Guide

U.S. Patent Search Assistance at a PTRC

Patent and Trademark Resource Center (PTRC) library staff are available to provide training on U.S. patent search processes and research tools including PubWEST, PubEAST and the USPTO website's PatFT and AppFT patent publication databases. For the PTRC nearest you, check www.uspto.ov/ptrc. For legal questions, contact an attorney or agent registered to practice before the USPTO. A listing is available at https://decki.uspto.ov/p.

U.S. Patent Prior Art Search vs. Comprehensive Prior Art Search

This guide provides a 7-step strategy for searching U.S. patents and published patent applications to locate and evaluate relevant prior art, any previous publication that discloses an invention and would preclude issuance. A comprehensive prior art search would also include foreign patent publications and non-patent literature (newspapers, magazines, dissertations, conference proceedings, and websites). PTRC staff can also provide training to how to least a these additional recovers.

Search Preparation and Documentation

Plan on spending a few hours learning the search process and additional hours for searching and evaluating results. The length of search time depends on the complexity of the invention. Careful recording of the search process (databases used, date and time of search, classes searched, and patents/published patent applications retrieved) is important.

1

STEP 1: Brainstorm Terms Describing Your Invention

Begin by writing down a brief, accurate description of the invention. Avoid overly broad and generic terms such as "device," "process" and "system." Consider synonyms for the terms you initially select. Note important keywords and technical terms. Use the following questions to help identify keywords and concepts.

- What is the purpose of the invention? Is it a utilitarian device or an ornamental design?
- Is the invention a process a way of making something or performing a function – or is it a product?
- What is the invention made of? What is the physical composition of the invention?
- · How is the invention used?

USPTO website

https://www.uspto.gov/

•This presentation will demonstrate the Seven Step Search Strategy utilizing CPC classifications as suggested by the USPTO, found at https://www.uspto.gov/learning-and-resources/support-centers/patent-and-trademark-resource-centers-

 Alternate database: Espacenet https://worldwide.espacenet.com/

ptrc/resources/seven.

Classification

- In general, a classification system is a system of hierarchical categories used to organize like "things" by their characteristics and relationships
- Classification systems are very useful for sorting and searching large collections of information, including inventions.



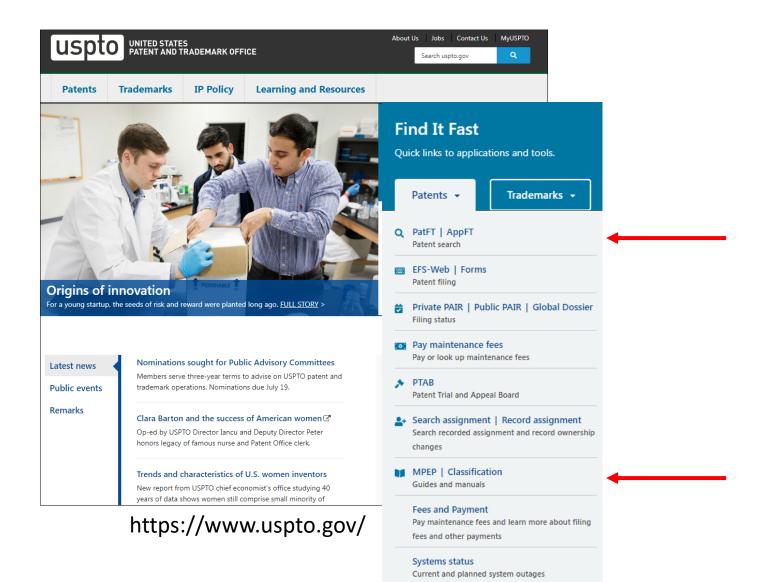
Why are keywords alone not enough?

 How would you describe this object if you were to do a patent search for it? Spongelike? Floppy? Strands? Any other words which describe it?

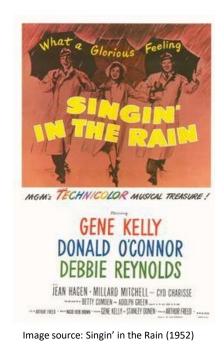


United States Patent [19]		[11] Patent Number: 4,756,529		
Stil	linger	[45] Date of Patent: Jul. 12, 1988		
[54] GENERALLY SPHERICAL OBJECT WITH FLOPPY FILAMENTS TO PROMOTE SURE CAPTURE		4,149,723 4/1979 Simon		
[75]	Inventor: Scott H. Stillinger, Los Gatos, Calif.	FOREIGN PATENT DOCUMENTS		
[73]	Assignee: OddzOn Products, Campbell, Calif.	3121758 12/1982 Fed. Rep. of Germany 446/901 Primary Examiner—Richard T. Stouffer		
[21]	Appl. No.: 60,640	Attorney, Agent, or Firm—Kolisch, Hartwell &		
[22]	Filed: Jun. 11, 1987	Dickinson		
[51] Int. Cl. ⁴		[57] ABSTRACT An amusement device which has a substantially spherical configuration, and which is formed from a large plurality of floppy, elastomeric filaments that radiate in a dense, bushy manner from a central core region. The filaments are sufficiently floppy to collapse on impact,		
U.S. PATENT DOCUMENTS		they tend to quickly thread their way between the fin-		
2,290,216 7/1942 Steinmetz et al		gers of a user on contact with the hand. These features promote sure and quick capture of the device during the act of catching.		

Patent Searching at USPTO website



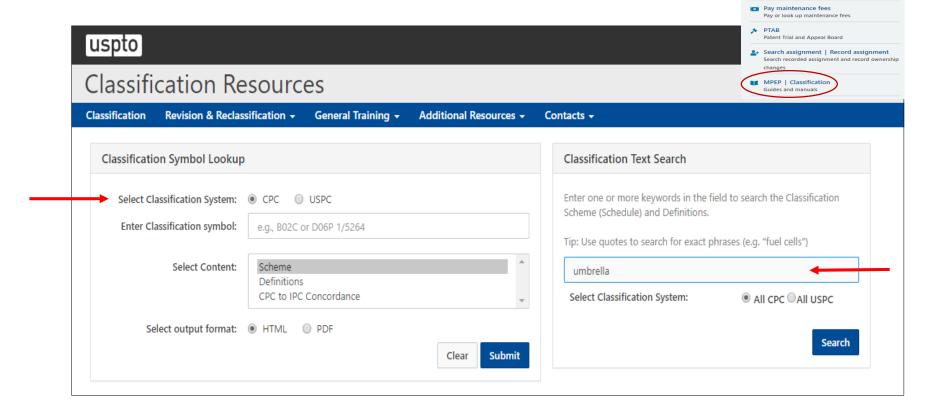
Search Example: improvement in umbrellas



- Purpose: Umbrella has a new rib design to eliminate an umbrella collapsing or inverting due to high winds.
- **Invention:** An improvement in umbrellas to eliminate need for frequent replacement of umbrellas.
- Invention Components: Framework with ribs, stretchers and a main frame, securing rings, mounting brackets, joint connectors, fabric connectors, fabric, linkage bar.
- **How used:** As needed in protection from the elements.
- Other terms (in addition to above): Parasol, sunshade, support assembly or apparatus, windproof, wind-resistant.

Accessing CPC schema using USPTO website

From the USPTO home page, click on Patents tab under Find It Fast. Select Classification. CPC classification scheme (schedules) and definitions can be searched. Use specific language for your search terms, such as **umbrella**.



Find It Fast

Q PatFT | AppFT
Patent search

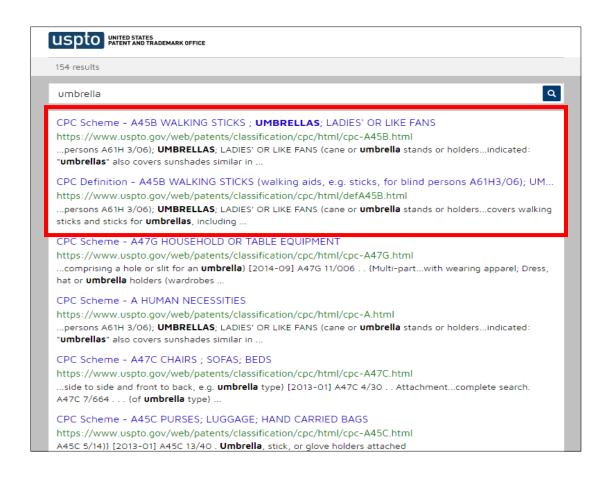
EFS-Web | Forms

Quick links to applications and tools.

Private PAIR | Public PAIR | Global Dossier

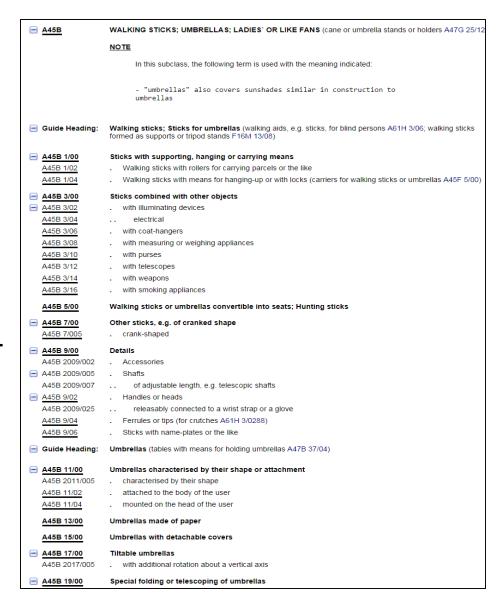
Trademarks -

From the Search Results page, click on an entry for a Class-Subclass Scheme page.



Scan the Scheme

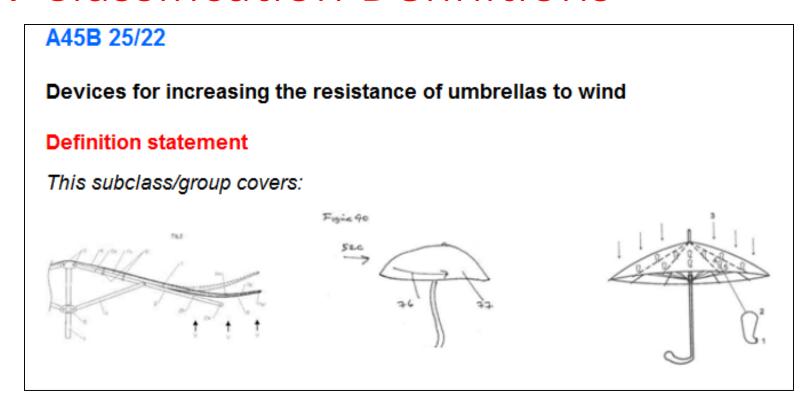
- Since the scheme (schedule) for Class-Subclass A45B is not long, you can scan up and down the page to find a relevant classification for a windresistant design.
- Or Find Command:
 Control+F on PC, or
 Command+F on a Mac,
 to search long listings.



Best subgroup match is A45B 25/22

-	A45B 25/00	Details of umbrellas ()	
	A45B 2025/003		Accessories not covered by groups A45B 25/24 to A45B 25/30
	A45B 25/006		Automatic closing devices ()
	A45B 25/02		Umbrella frames
	A45B 25/04		Devices for making or repairing
-	A45B 25/06		Umbrella runners
	A45B 25/08		Devices for fastening or locking
-	A45B 25/10		Umbrella crowns ()
	A45B 2025/105		movable with respect to the shaft
	A45B 25/12		Devices for holding umbrellas closed, e.g. magnetic devices
	A45B 25/14		Devices for opening and for closing umbrellas
	A45B 25/143		automatic
	A45B 2025/146		with a crank connected to a rope
-	A45B 25/16		Automatic openers, e.g. frames with spring mechanisms ()
	A45B 25/165		with fluid or electric actuators
	A45B 25/18		Covers (); Means for fastening same
	A45B 2025/183		Covers with filtering or screening means for avoiding undesired radiation
	A45B 2025/186		Umbrellas with two or more covers
	A45B 25/20		Windows in covers
	A45B 25/22		Devices for increasing the resistance of umbrellas to wind
	A45B 25/24		Protective coverings for umbrellas when closed

Review Classification Definitions



This CPC definition is unusual in that it relies entirely on patent drawing examples to illustrate the classification. There is no word description.

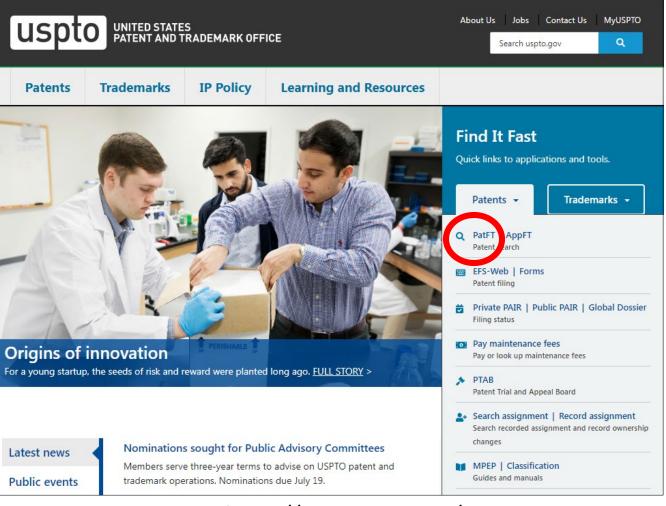
Retrieve and Review Issued Patents

We identified A45B 25/22 as a relevant classification for our umbrella invention.

Now it's time to access U.S. patents that have been issued in that category to see if someone else previously came up with that idea.

Remember, if a claimed invention has previously been publicly disclosed in "Prior Art" such as a U.S. patent, you cannot now get a patent on it yourself, because the invention will lack novelty (newness).

Run the CPC search in PatFT (Patents Full Text)



https://www.uspto.gov/

Quick Search Form

- 1.Enter the CPC classification in the Term 1 Box (important: delete the gap in middle of classification A45B 25/22).
- 2.In the Field 1 drop down box select "Current CPC Classification" (important: do not select "Current CPC Classification Class" which limits search to the Class only portion of the classification).
- 3.For Select years, use drop down to select **1790 to present [entire database].**



Review Issued Patents

Click on patent

Title or Patent

Number to access

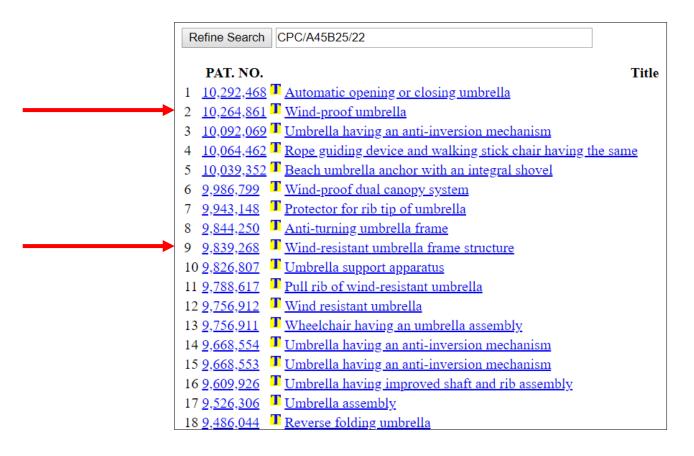
Each patent.

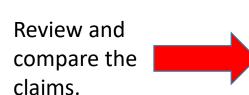
Searching US Patent Collection...

Results of Search in US Patent Collection db for:

CPC/A45B25/22: 203 patents.

Hits 1 through 50 out of 203





♥ United States Patent: 10264861 × + - ø × ← → C ↑ 0 Not secure | patrt.uspto.gov/netacgi/nph-Parser/Sect1=PTO2&Sect2=HITOFF&p=1&u=%2Fnetahtml%2FPTO%2Fsearch-bool.html&r=2&f=G&l=50&co1=AND&d=PTXT&s1=A45825%2F22.CPC.&OS=CPC/A45825/22&RS=CPC/A45825/22 🔢 Apps 🔳 Kentucky Inventors... 🔳 Omeka.net | Login ㅏ Work Control: Nort... 🧐 MaintenanceDirect 🚱 Northern Kentucky... 😝 Home | Thomson R... USPTO PATENT FULL-TEXT AND IMAGE DATABASE Next List | Previous Next View Cart Add to Cart (2 of 150) United States Patent 10,264,861 April 23, 2019 Wind-proof umbrella Abstract An umbrella includes a shaft, a top cap and a runner. Multiple rib units and multiple stretchers are pivotably connected to the top cap and the runner. The rib units each have a first rib, a second rib and a third rib. The first, second and third ribs are pivotably connected in sequence. A canopy is mounted to the rib units. The second ribs each have a first connection portion on one end thereof, and the first connection portion has a seat which is connected to a link unit. The link unit has a joint which is connected to the third rib. The third rib has a positioning member to position the joint. The third rib and the joint are connected with each other to bear wind force applied to the second rib and the third rib and the joint are connected with each other to bear wind force applied to the second rib and the third rib and the joint are connected with each other to bear wind force applied to the second rib and the third rib and the joint are connected with each other to bear wind force applied to the second rib and the third rib. rib, such that the second and third ribs do not deform. Inventors: Su; Yen-Shuo (Hsin-Chu, TW) Applicant: City State Country Type Su; Yen-Shuo Hsin-Chu N/A TW Family ID: 63580913 15/464,655 Appl. No.: March 21, 2017 Filed: Current U.S. Class: A45B 25/22 (20130101); A45B 25/02 (20130101); A45B 19/00 (20130101); A45B 25/06 (20130101) Current CPC Class: A45B 25/22 (20060101); A45B 19/00 (20060101); A45B 25/06 (20060101); A45B 25/02 (20060101) **Current International Class:** References Cited [Referenced By] U.S. Patent Documents 539762 May 1895 Barnett 786471 April 1905 Wallace 1167431 January 1916 Raabe 6186157 February 2001 Lin 6588439 July 2003 Wu 6863081 March 2005 Hsieh 7415986 August 2008 Wu June 2017 Haythornthwaite 9668554 June 2017 Haythornthwaite 9788617 October 2017 Chen December 2004 Lee Chen May 2007 August 2017 Chen August 2017 Haythornthwaite

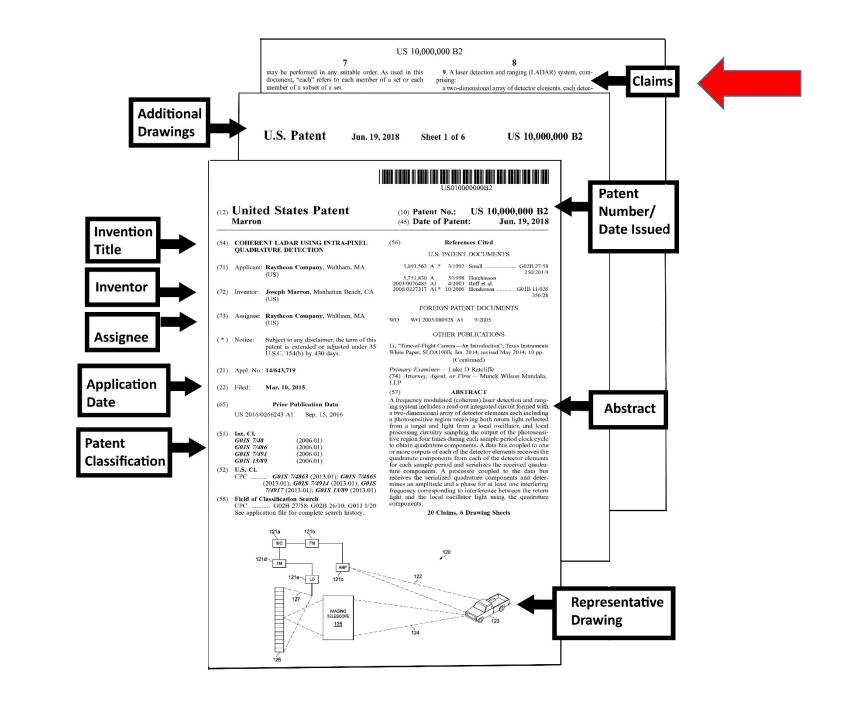
What is claimed is:

Primary Examiner: Hawk; Noah Chandler

1. An umbrella comprising: a shaft having a top cap connected to a top end thereof; a numer movably mounted to the shaft; multiple rib units radially pivotably connected to the top, each of the rib units having a first rib, a second rib and a third rib, wherein an inner end and an outer end of the first rib are pivotably connected to the top cap and an inner end of the second rib are pivotably connected to the outer end of the first rib and an inner end of the third rib; rib respectively, and an inner end of the third rib is pivotably connected to the outer end of the second rib; multiple stretchers, radially pivotably connected to the numer, each stretcher being an independent piece, and two ends of each stretcher being separately pivotably connected between the runner and a middle section of one of the first ribs; and a canopy mounted to the rib units; wherein the outer end of the each of the second ribs is provided with a first connection portion connecting the inner end of one of the third rib, the first connection portion has a pivoting seat which is connected to an end of a sliding link, another end of the sliding link has a slidable joint freely slidably connected to the third rib, the sliding link is a non-foldable rod without an intermediate foldable joint, and a positioning member is unmovably mounted on the third rib at an inner position from the slidable joint when the slidable joint moves inward.

Claims

- 2. The umbrella as claimed in claim 1, wherein the sliding link is formed by two parallel rods.
- 3. The umbrella as claimed in claim 1, wherein each of the slidable joints is a sleeve.
- 4. The umbrella as claimed in claim 1, wherein each of the first ribs has a first end connected to the top cap, and a second end of each first rib has a second connection portion, each of the second ribs has a third connection portion on one end thereof, and the second connection portion is overlapped with and connected to the third connection portion so as to form a support point.
- $5. \ The \ umbrella \ as \ claimed \ in \ claim \ 1, \ wherein \ the \ umbrella \ is \ a \ foldable \ umbrella \ or \ a \ single \ shaft \ umbrella.$



Reviewing Patents Found



7-Step U.S. Patent Search Strategy Guide

U.S. Patent Search Assistance at a PTRC

Patent and Trademark Resource Center (PTRC) library staff are available to provide training on U.S. patent search processes and research tools including PubWEST, PubEAST and the USPTO website's PatFT and AppFT patent publication databases. For the PTRC nearest you, check www.uspto.gov/ptrc. For legal questions, contact an attorney or agent registered to practice before the USPTO. A listing is available at https://god/juspto.gov/

U.S. Patent Prior Art Search vs. Comprehensive Prior Art Search

This guide provides a 7-step strategy for searching U.S. patents and published patent applications to locate and evaluate relevant prior art, any previous publication that discloses an invention and would preclude issuance. A comprehensive prior art search would also include foreign patent publications and non-patent literature (newspapers, magazines, dissertations, conference proceedings, and websites). PTRC staff can also provide training on how to locate these additional resources.

Search Preparation and Documentation

Plan on spending a few hours learning the search process and additional hours for searching and evaluating results. The length of search time depends on the complexity of the invention. Careful recording of the search process (databases used, date and time of search, classes searched, and searchs/oublished patent applications retrieved by its important.

1

STEP 1: Brainstorm Terms Describing Your Invention

Begin by writing down a brief, accurate description of the invention. Avoid overly broad and generic terms such as "device," "process" and "system." Consider synonyms for the terms you initially select. Note important keywords and technical terms. Use the following questions to help identify keywords and concepts.

- What is the purpose of the invention? Is it a utilitarian device or an ornamental design?
- Is the invention a process a way of making something or performing a
- function or is it a product?
- What is the invention made of? What is the physical composition of the invention?
- How is the invention used?

We have reviewed the USPTO's recommended Seven Step Strategy. It offers the potential for a thorough preliminary patent search. Here's a link to that guide:

https://www.uspto.gov/learning-andresources/support-centers/patent-and-trademarkresource-centers-ptrc/resources/seven

We have executed four of those steps. Searchers would continue on by reviewing the front pages of the patents, flagging the most relevant ones, and reviewing those in depth, *including the claims*.

The scope of this presentation is merely to highlight how you would retrieve relevant patents using both keyword searching and classification searching.

What about those claims?

- "Claims mark the boundaries of the protection provided by a patent, just as a physical boundary such as a fence, marks the limits of a parcel of real property."
 - -World Intellectual Property Organization
- Each claim is a single numbered sentence located in a patent document. It identifies fundamental inventive aspects.
- Other sections in the patent document, such as specifications, merely support the claims.
- Without strong claims, a patent is useless.



Examples of Patent Claims





US Patent 6,263,732, July 24, 2001, Hoeting et al.

Inventor background video: https://vimeo.com/86737256

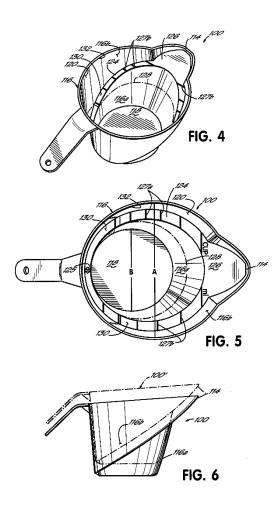
A Single Solid Claim

- What is claimed is:
 - 1. A measuring device, comprising:

a bottom wall and a generally vertical and encircling side wall having a lower edge and an upper edge, said sidewall defining an upwardly opening cup with an upper end;

a spout attached integrally to said sidewall; and

a pair of continuously sloping ramps formed integrally with and radially inward in relief from said sidewall, said ramps extending from about said bottom wall generally opposite said spout toward said open upper end generally adjacent said spout, wherein said ramp is coextensive with said spout, said ramp having an upwardly directed surface and indicia located on said upwardly directed surface being at least one of standard and metric units of measurement providing a readily observable indication of the volume of the contents contained within said cup.



In·di·ci·a [inˈdiSH(ē)ə]

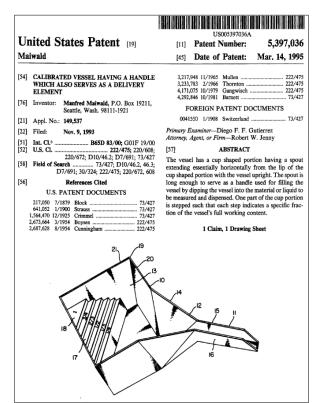


Oxo Angled Measuring Cup

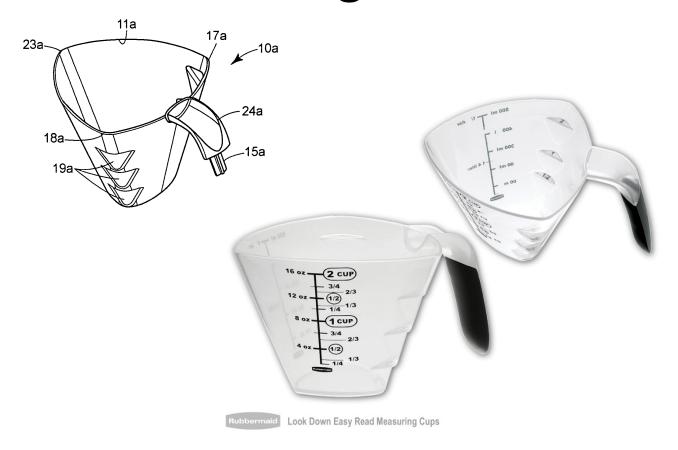
- What would you do? How would you compete with another patent to Hoeting's Angled Measuring Cup without infringing?
- What claims might you come up with?
- NOTE: At right, Hoeting's comparable reference to US Patent 5,397,036, Maiwald, 1995 offers a clue.
- We were only able to locate (next slide) two newer patents that attempted to provide similar utility function and outcome without employing the same claimed method from Hoeting's US Patent 6,263,732.
- For more about drafting claims, see <u>https://www.ipwatchdog.com/2016/06/1</u> <u>1/introduction-patent-claims/id=69991/</u>



What Would You Do?

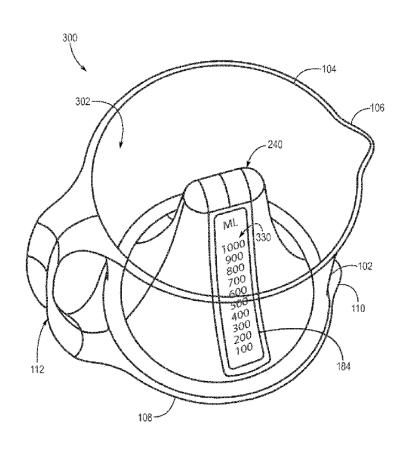


US Patent 7,306,120 Hughes



Claim highlight:...a plurality of vertically spaced apart steps disposed inside the cup with each step having a top horizontal surface marked with volumetric indicia...

US Patent 9,354,098 Breit



Primary claim highlight:...a reference member disposed substantially in a central portion of the space formed by the sidewall, the reference member having volumetric indicia that are at least partially upwards-facing; and a receptacle capable of receiving a substance, the receptacle formed by a portion of the space between the reference member and the sidewall, wherein the volumetric indicia of the reference member indicate a volume of the substance deposited in the receptacle...

Competitive Intelligence in Patent\$



- Search assignee fields in patent databases.
- Using patents found via classification clusters locates competitors' patents from same field.
- Determine strength of patent by number of cited references by many later patents.
- Future trends could be explored by classification cluster of patents reviewed over period of time and same classifications for applications in process.



Best Practices and Outreach

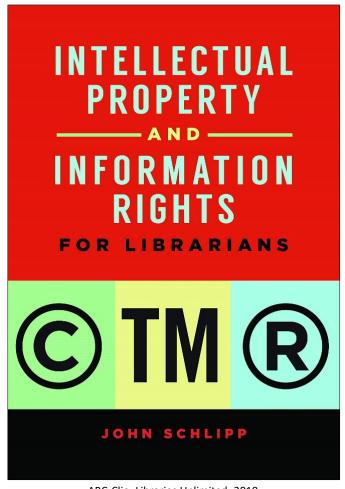


Image source (public domain): https://thenounproject.com/

- PTRC opportunities to extend IP awareness and information literacy for your library customers:
 - Martin Wallace and Suzanne Reinman, "Expanding the Intellectual Property Knowledge Base at University Libraries: Collaborating with Patent and Trademark Resource Centers," in Issues in Science and Technology Librarianship, Number 88, Winter 2018: http://www.istl.org/18-winter/refereed3.html.
 - John Schlipp, "Best Practices and InventorFest: Community Partner and Patent and Trademark Depository Libraries," IP Journal of the Patent & Trademark Resource Center Association, November 2007, http://ptrca.org/journal/2007schlipp.
- Other outreach opportunities include scholarly communications departments, makerspaces, inventor and entrepreneur groups, authors and musicians, STEM instruction and presentations, etc.
- Open Access Week, and World Intellectual Property Awareness Day are added examples of turn-key programs to promote IP awareness to your customers.

For Additional Details...

For supplementary patent and trademark information, see https://www.uspto.gov/



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ABC-Clio, Libraries Unlimited, 2019

https://www.abc-clio.com/LibrariesUnlimited/product.aspx?pc=A6068P

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 @ Steely Library
 https://inside.nku.edu/ipac.html