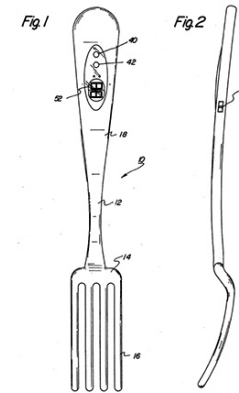
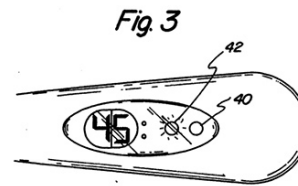




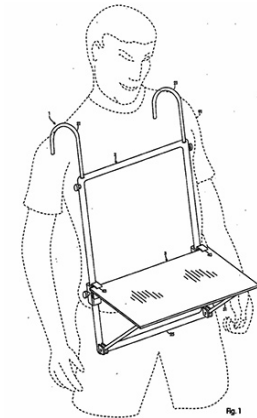
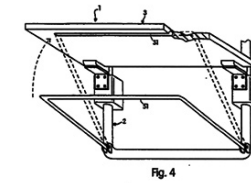
Introduction to Patents

Learn the basics

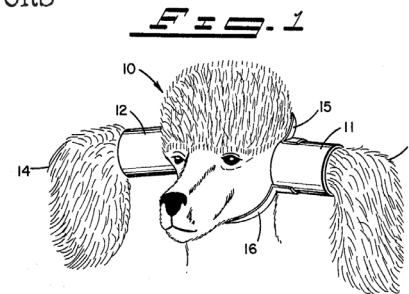
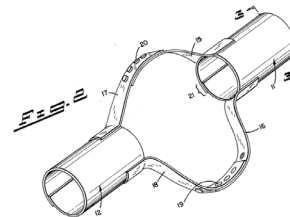
NICOLE M. DUBUS
SUSAN SPRINGFIELD
FORK WITH TIMER
Patented June 6, 1995
No. 5,421,089



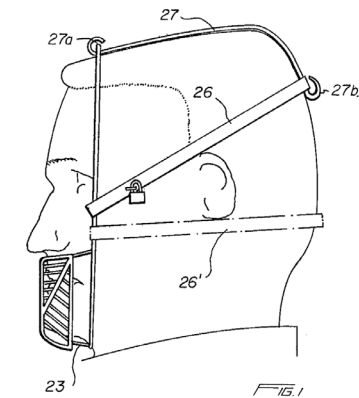
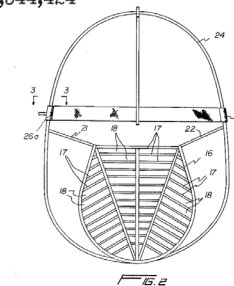
ALAN C. BAUER
WEARABLE TABLE
Patented June 6, 1995
No. 5,421,499



JAMES D. WILLIAMS
ANIMAL EAR PROTECTORS
Patented November 18, 1980
No. 4,233,942



LUCY L. BARMBY
ANTI-EATING FACE MASK
Patented August 17, 1982
No. 4,344,424

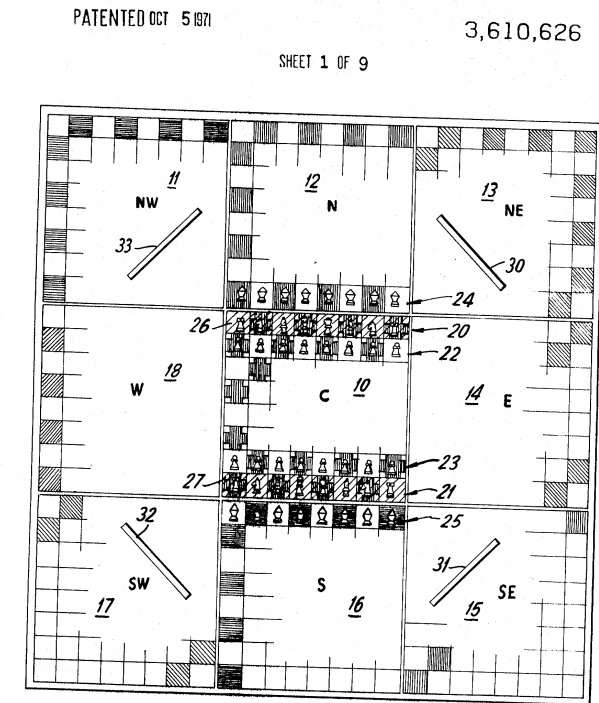




Information provided in this session does not constitute legal advice.

Learning outcomes

- Understand the basics of patents and its place in the intellectual property world
- Recognize the importance of patent literature for researchers, engineers, and entrepreneurs
- Search and browse major platforms for patent information

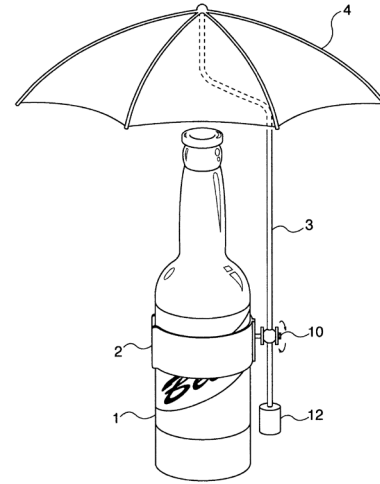


INVENTOR,
LAWRENCE H. NOLTE
BY
Morgan, Kinnegan, Durham & Line
ATTORNEYS



Intellectual Property Explained

What is it and what does it protect?



(No Model.)
S. WHEELER.
TOILET PAPER ROLL.
No. 465,588. Patented Dec. 22, 1891

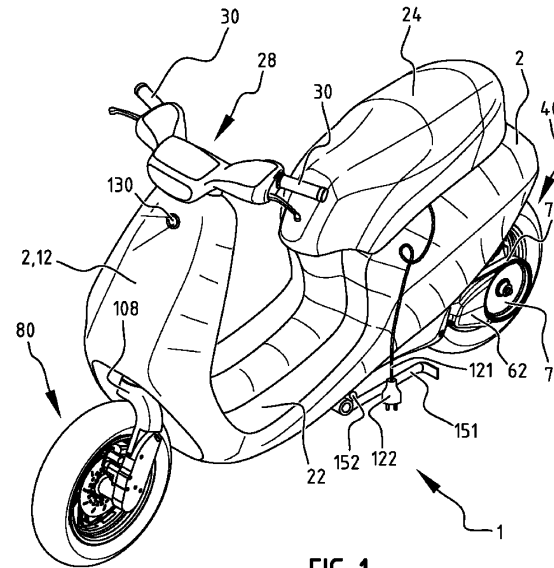
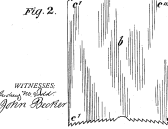
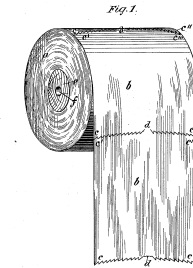
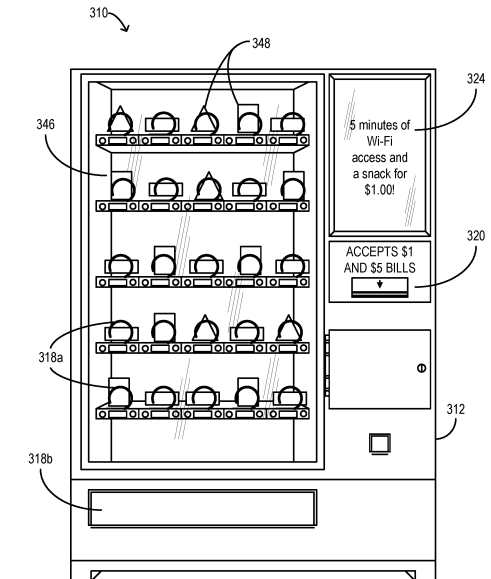


FIG 1






Intellectual Property (IP) overview

- What is IP?
 - Creations of the human mind
 - Pictures, inventions, symbols, logos, designs, literary works, artistic works...
- Why IP rights?
 - Provide legal protection for innovations
 - Balance the rights and interests of different groups:
 - Inventors and competitors
 - Creators and consumers



Major types of IP

	Copyright	Patent 	Trademark	Industrial Design	Trade Secret
What does it protect?	Artistic and literary works	Inventions	Brands	The aesthetic appearance / How something looks	Information that is commercially-valuable
What are some examples?	Films, books, articles, music, images, paintings...	Devices, processes, machines, chemical compositions...	Logos, slogans, symbols...	Shape, configuration, pattern, ornament,	Recipes, methods, techniques, customer and supplier list
How long does it last?	Life of authors plus 50 years (soon to be changed to 70 years)	20 years from the Canadian filing date	Indefinitely, renewable every 10 years	10 – 15 years	Indefinitely, as long as the information remains confidential



Multiple IPs could exist in a product

Multiple IPs in an iPhone

Copyright	Software codes, user manuals
Patent	Hardware component, technical solutions
Trademark	The name iPhone, company logo
Industrial design	The unique look, position and shapes of the screen and buttons
Trade secret	Technical information kept in-house, not published

A Closer Look at Patents

What can be patented and what is the process to file a patent application?

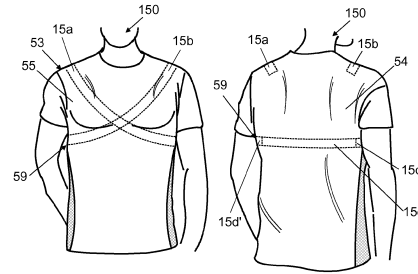


Fig. 4

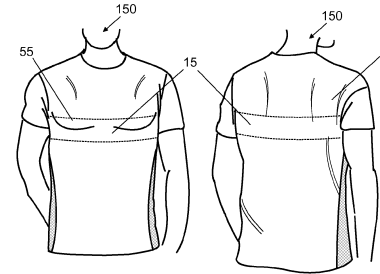
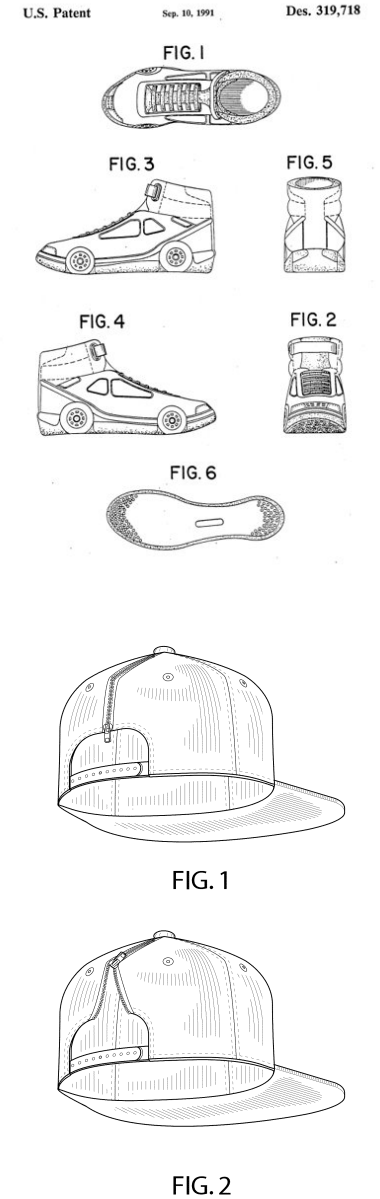
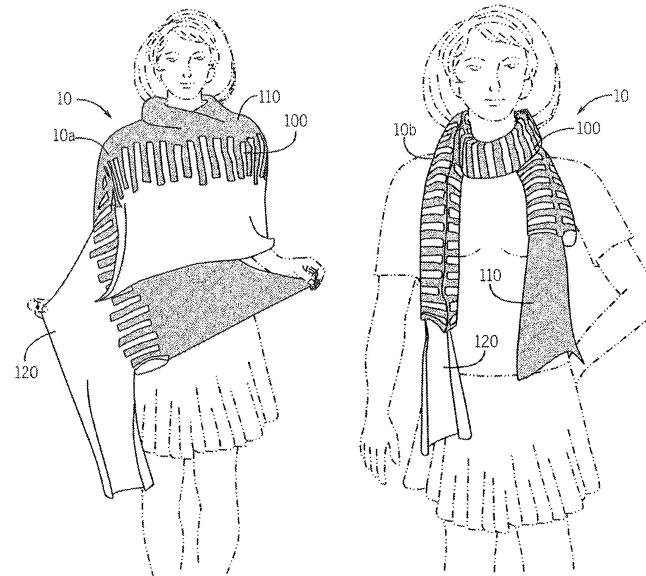


Fig. 5





What can be patented?

Any invention that offers a new way of doing something, or a new technical solution to a problem.

What are the criteria?

- New
- Non-obvious
- Useful

What can be patented?



Products (e.g. VR headset)



Processes or methods (e.g. distillery process, methods of bottling liquids)



Machines (e.g. Sewing machine)



Structure or composition (e.g. Chemical compound, biosequence)



What cannot be patented?

- Higher life forms (e.g. animal, plant, cellular organism)
- Scientific theories
- Mathematical models and formulas
- Ideas in your head

Funny patents

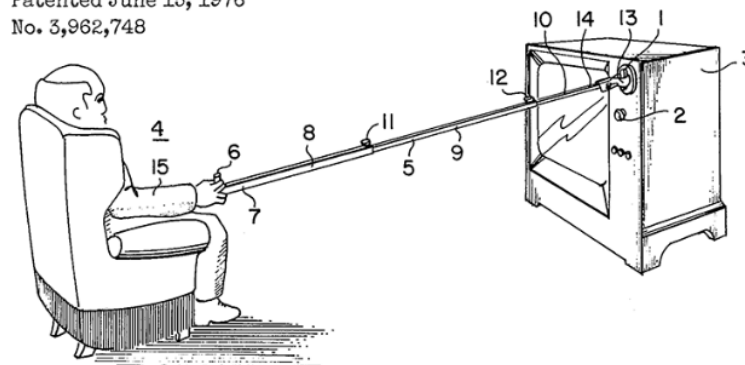
The World Intellectual Property Organization (WIPO) creates a list of out-of-the-ordinary, weird and wonderful patents every year.

2021 Patent Picks – Weird and Wonderful

If ever proof were needed that innovation knows no bounds, look no further than our list of out-of-the-ordinary patents.

TV Control Device (1976)

CHRIS T. MICHAELS
TV CONTROL DEVICE
Patented June 15, 1976
No. 3,962,748



This TV control device, patented by Chris Michaels in 1976, allows you to change channels, adjust volume and more from the comfort of your sofa. Resembling a pool cue, the rod is of "variable adjustable length" and "considerably less expensive than its electrical and electronic counterparts, and functions efficiently" – the patent explains. And it's for sure easier to find than a misplaced classic remote control.



How to file for a patent in Canada?

Canadian Intellectual Property Office

- Oversees the administration and processing of IP in Canada
- Maintains the Canadian Patent Database
- Provides many educational resources on IP

The Filing Process

- Work with a legal professional
- File as early as possible
- Whole process takes at least 2-3 years
- Applicable fees at different stages



Patent application roadmap

IP roadmap

Your path to getting a **patent** grant

1

Filing your application

To obtain a filing date, your application must include:

- an indication that the grant of a patent is intended
- identification of the applicant and their contact information
- a description of the invention (in any language)

If you do not submit all filing requirements, CIPO will send you a notice. You have 2 months from the date of the notice to reply before your application will be deemed never to have been filed.

Paying the application fee is not required to receive a filing date.

If you do not pay the application fee when you file, CIPO will send you a notice asking for the application fee and a late fee. You have 3 months from the date of the notice to reply before your application is considered withdrawn.

Do not publicly disclose your invention until you have filed your application with CIPO.

2

Filing certificate issued

If your application meets all the filing requirements, CIPO will send you a filing certificate within a few weeks of receiving your application. The certificate will confirm your application number and filing date.

3

Checking compliance

CIPO will check that your application includes:

- a petition (a formal request for a patent)
- an abstract (a summary of your invention)
- a claim or claims to the invention
- a statement of entitlement or inventorship
- the appointment of an agent, if the application is filed by someone other than the inventor(s)
- the name and postal address of each inventor
- drawings and a sequence listing, if applicable

If your application is missing required parts, CIPO will send you a notice. You must provide the missing information no later than 3 months after the date of the notice.*

5

Paying your maintenance fee

You will need to pay annual maintenance fees starting from the second anniversary of your filing date. These fees keep your patent application or patent in good standing.

If you do not pay your maintenance fee by the due date, CIPO will send you a notice (a late fee will apply). You must respond to this notice within 6 months after the maintenance fee due date or within 2 months after the date of the notice, whichever comes last.*

4

Your application is available online

In most cases, CIPO will make your application available to the public online through the Canadian Patents Database 18 months after the earliest priority date or your filing date.

6

Requesting an examination

Examination is the process of determining if an application qualifies for a patent. CIPO will only examine your patent application if someone requests it within 4 years of the filing date of your patent application.

If you do not request an examination within this time, CIPO will send you a notice. You will then have 2 months from the date of the notice to request an examination. A late fee will apply.*

Requesting a fast-track examination

CIPO offers 3 ways to expedite an examination:

- accelerated examination under a special order
- accelerated examination under the Patent Prosecution Highway
- accelerated examination for clean technologies

Each of the above has its own request process.

8

Responding to the report

You can respond to the examiner's report by making changes to your application or presenting arguments.

You must respond no later than 4 months after the date of the examiner's report. Once your response is received, the examiner has 5 to 9 months to reconsider your application. You may then receive another examination report. Examination is an iterative process.

7

Examination and report

A patent examiner will determine if your patent application complies with the *Patent Act* and the *Patent Rules*.

You will receive a report from the examiner about 18 months after the request for examination, or within a few months for fast-tracked applications. The examiner will identify any defects in your application in the examiner's report.

Consider using a registered patent agent

Registered Canadian patent agents are qualified and entitled to act on your behalf with the Canadian Intellectual Property Office (CIPO). You can learn more and find one to help you at Canada.ca/ip-professional.

9

Allowance or rejection and final action

If your application is approved

CIPO will send you a notice of allowance confirming that you will receive a patent and asking you to pay a final fee within 4 months of receipt.

If your application is rejected

CIPO will send you a final action report explaining why your application was rejected. You will have a last chance to respond and present arguments or propose changes to your application.

Appealing your rejection

If the examiner is still unsatisfied, CIPO will refer your application to the Patent Appeal Board. You may appear before the Board to argue your case. The Board will recommend that your application be allowed, allowed if amended, or refused by the Commissioner of Patents.

If your application is refused at this stage, you may appeal to the Federal Court of Canada within 6 months.

* If you do not reply to the notice within the indicated time, your application will be deemed abandoned.

10

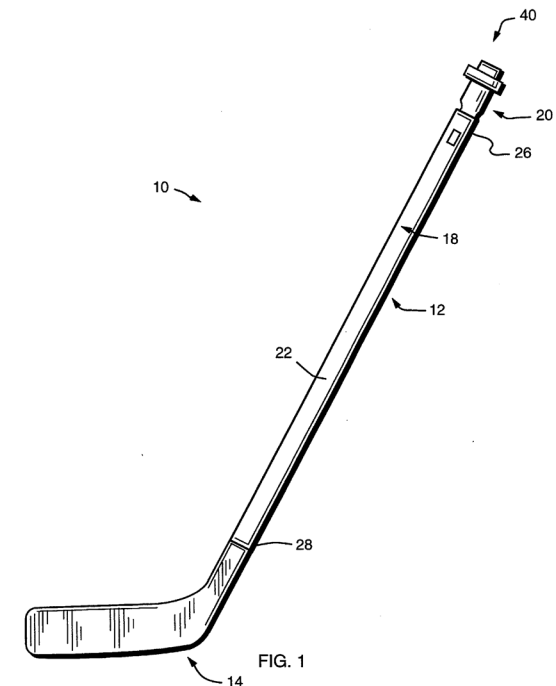
Granting of patent

After approval, upon receipt of your final fee, CIPO will send you a letter by email or regular mail advising that your patent has been issued. The letter will include a link to our patent download page and a special code that will allow you to download your patent.

What protection does a patent give?

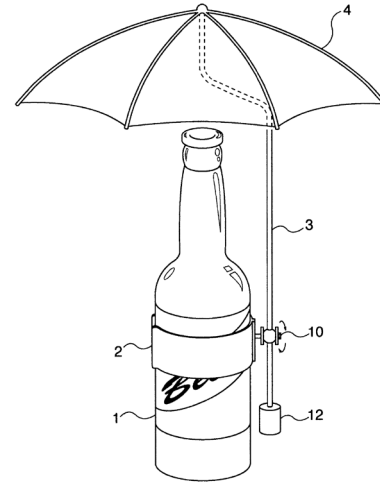
- Exclusive right to prevent others from making, using or selling your invention in any manner for **up to 20 years**
- Only applies to countries that have granted you a patent
 - The Patent Cooperation Treaty (PCT) helps in international protection, but still needs to apply locally
- In exchange, detailed technical information on the invention needs to be disclosed

U.S. Patent Mar. 11, 1997 Sheet 1 of 6 5,609,336

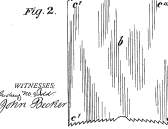
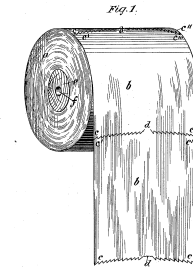


Searching for Patents

Different reasons and different types



(No Model.)
S. WHEELER.
TOILET PAPER ROLL.
No. 465,588. Patented Dec. 22, 1891



WITNESSES
Attest to the fact
John D. Butler
INVENTOR
S. Wheeler

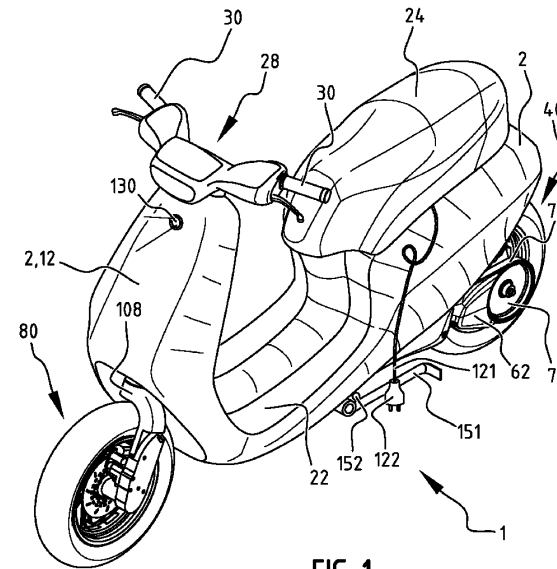
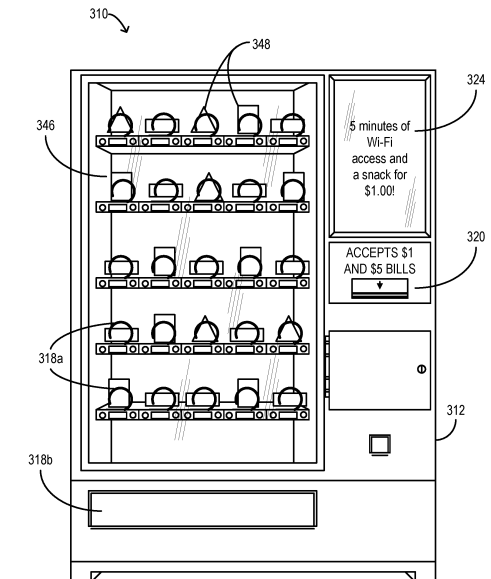


FIG 1



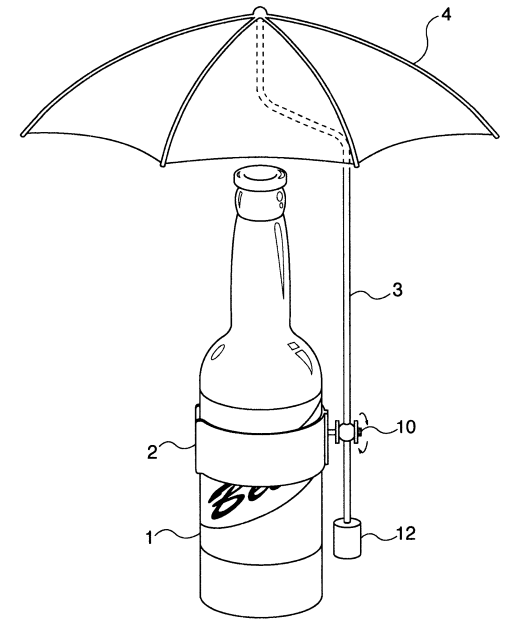


What information does a patent contain?

Title
Inventor, applicant, assignee information
Patent number
Patent filing date
Patent issue date
Classification
Referenced patents
Abstract
Claims
Background of the invention
Summary of the invention
Drawings
Brief description of drawings
Patent agent/patent attorney
Patent examiner

Why search for patents?

- Freely available in abundance
 - A type of grey literature that tends to be underutilized
- Rich source of technical information, much does not appear elsewhere
- Informs new research and business opportunities



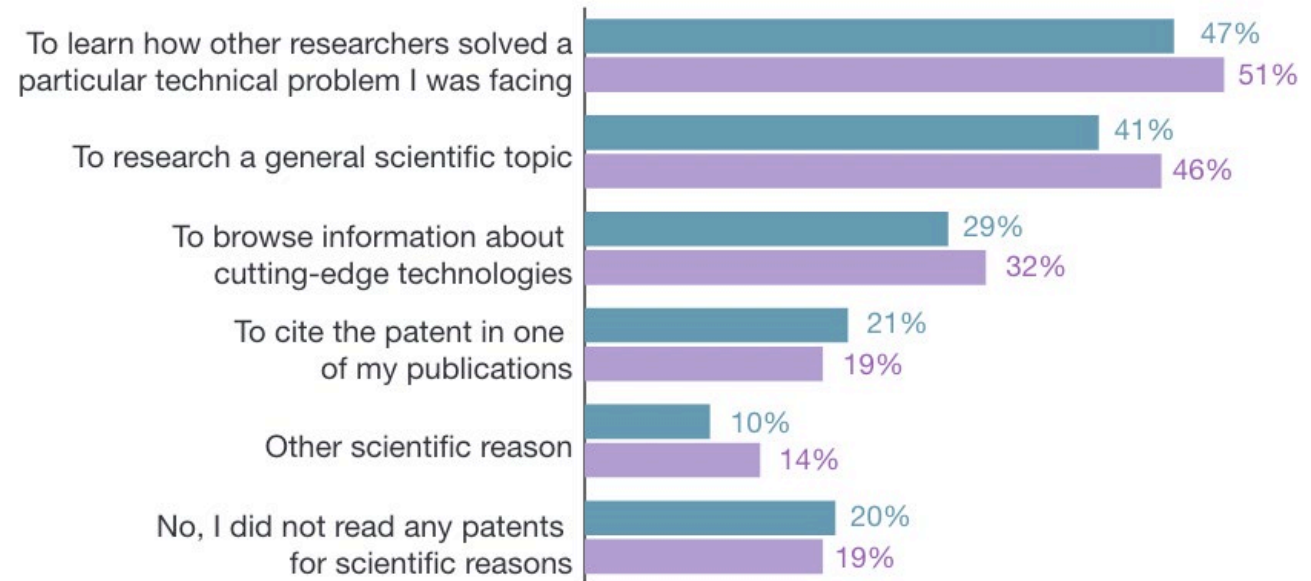


Why read patents?

■ Academic, government or nonprofit ■ Industry

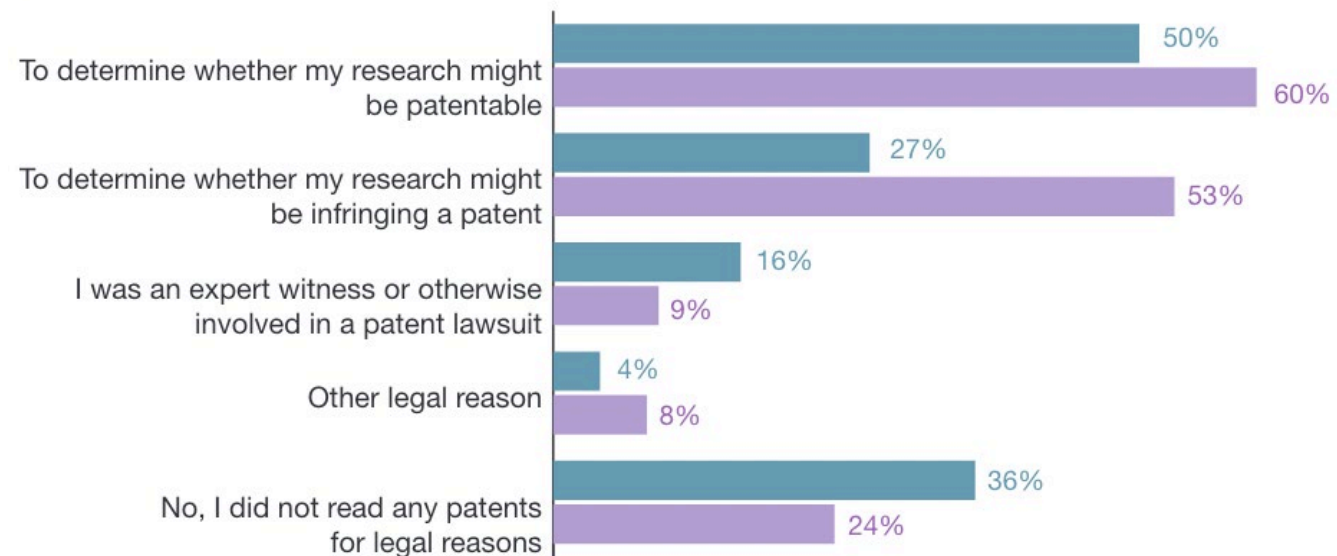
a

Scientific reasons for reading patents



b

Legal reasons for reading patents



Patent information searching

- Not just patents alone, but other literature too
 - Scholarly articles, trade publications, grey literature...
 - Provides background and context
 - May contain references to notable patents
- Different types of search for different purposes
 - Result in different levels of complexity, comprehensiveness, time required

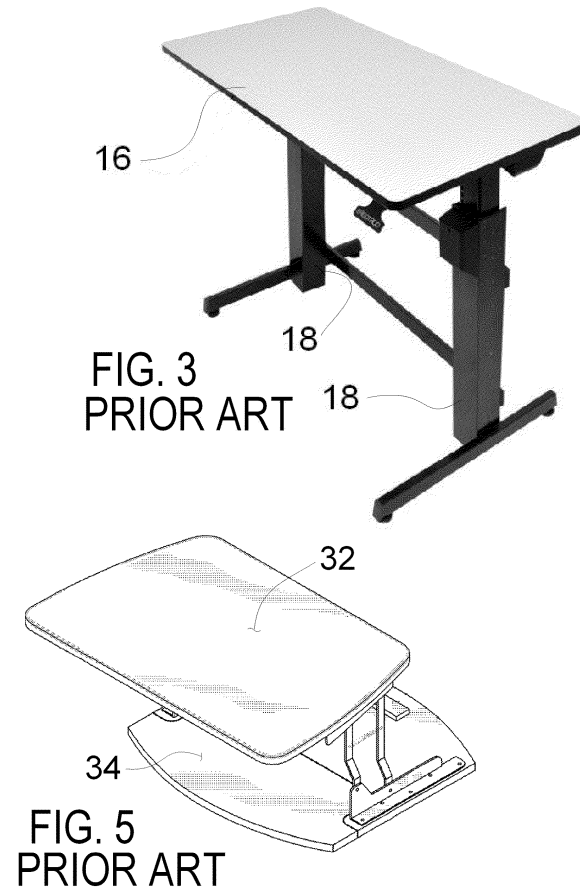


Types of patent searches

Search Type	Purpose
State-of-the-art search	To sample each major facet of a broad technology within a recent period. To gain a comprehensive overview of a product or technology before any R&D investment is made or when looking for a technology to license
Evidence of use search	To identify literature supporting evidence that a product encompassed by the claims of an active subject patent is being made, used, sold or distributed within the jurisdiction or country of origin of the patent
Profiling patentability search	To identify prior art pertaining to both the core inventive concept and all sub-features for the purposes of drafting a patent application in light of the identified prior art
Patentability or novelty search	To identify prior art pertaining to the core inventive concept of an invention that may preclude the invention from being patentable
Clearance or freedom-to-operate search	To identify any enforceable, granted patents claiming the subject matter of a product that is intended to be made, used or sold, in a target jurisdiction or country
Validity or invalidity search	To identify prior art that describes the technology recited by the claims of a granted, target patent that would render the patent unpatentable as of the date it was applied for
Patent portfolio search, patent landscape search	The needs for landscape searches vary wildly and are typically business driven, to assess gaps of patent protection in an industry or comparing patent portfolios between two or more competitors

What is prior art?

- A legal term
- Any evidence that your invention is already known
- Includes patents, but also scholarly books and articles, conference proceedings, press releases, product literature, manuals...





Challenges in Patent Searching

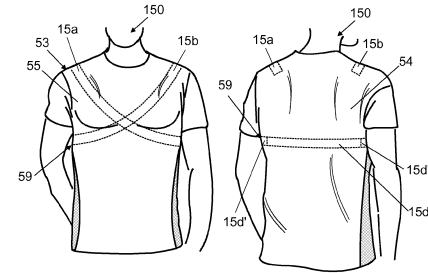


Fig.4

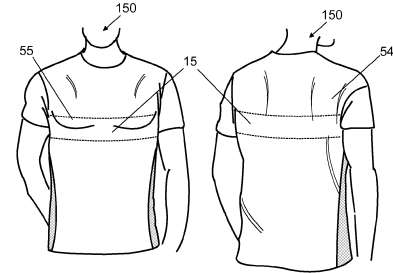
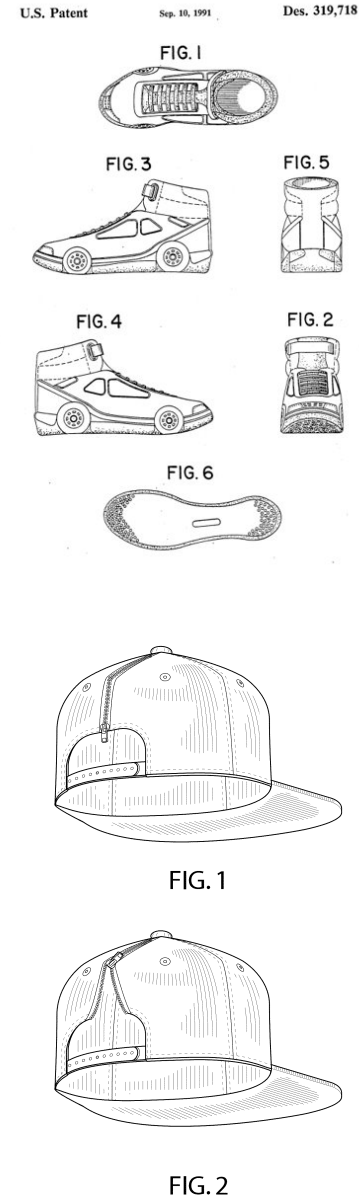
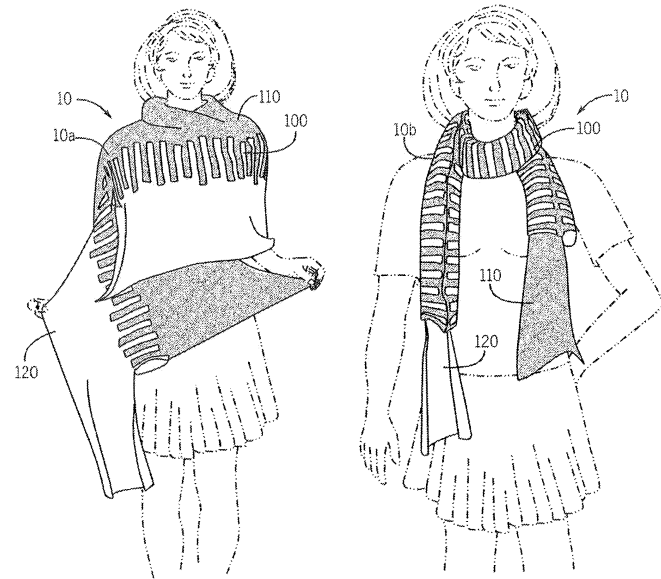


Fig.5





The Language (Patontese)

Very vague, inconsistent, and a lot of technical and legal jargons:

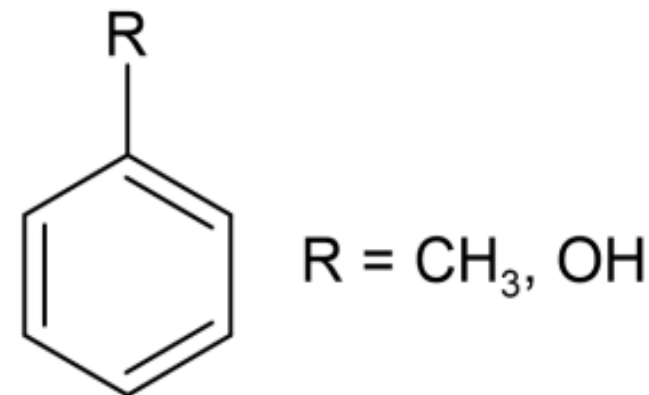
Common language	Patent language
Shoes	Footwear
T-shirt	Garment
Mobile phone	Electronic device
House paint	Exterior finish
Pills	Unitary dosage forms
Pen	Writing instrument
Tape measure	Linear comparison device
Screw	Fastening means



The language of certain disciplines

Key disciplines of inventions:

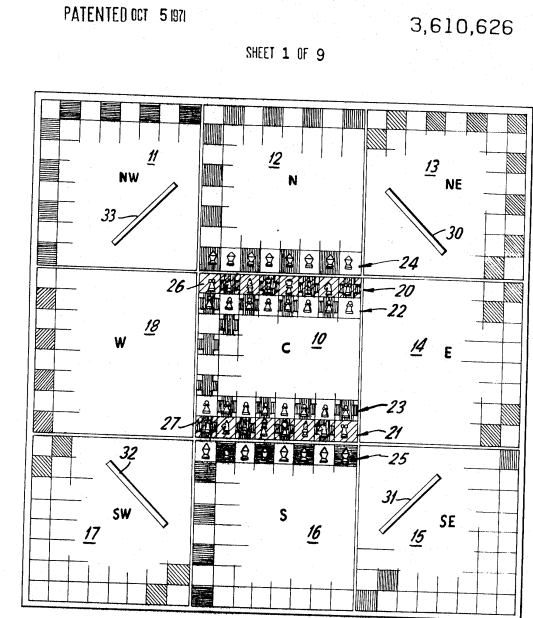
- Device/mechanical/electrical drawings
- Chemical structures
- Biosequence data



Some require very specialized subject matter knowledge for searching.

Classification systems

- Although highly structured, different classification schemes have been used by different countries over the years
- New versions come out to accommodate new technology

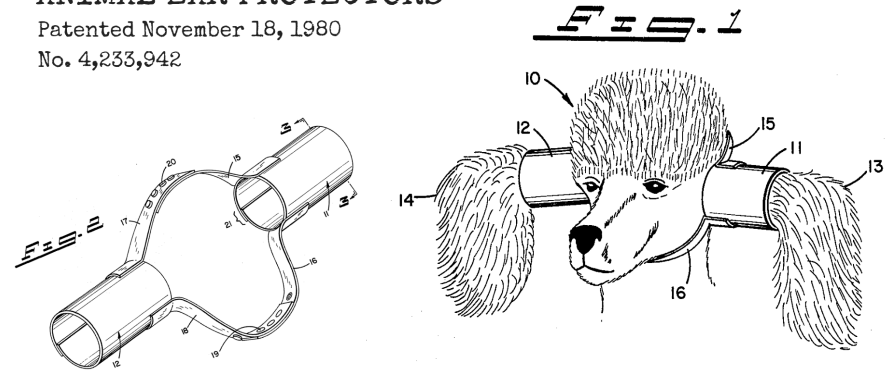


INVENTOR,
LAWRENCE H. NOLTE
BY
Morgan, Keimig, Durham & Pine
ATTORNEYS

International in scope

- Each country has its own patent office and database
- Some may not be available in English, which makes the searching even harder

JAMES D. WILLIAMS
ANIMAL EAR PROTECTORS
Patented November 18, 1980
No. 4,233,942





General Search Tips

Keyword searching is often not enough, think about:

- What is the function
- What materials is it made of
- What is the intended use

Combine keyword search with:

- Classification codes
- Citation tracing



Major Patent Classification Systems

- International Patent Classification (IPC), used in Canada since 1978
 - An extended version is Cooperative Patent Classification (CPC)
- European Classification system (ECLA)
- United States Patent Classification (USPC)
- Japanese File index and F-Term (FI/F-Term)



International Patent Classification (IPC)

+	A	HUMAN NECESSITIES
+	B	PERFORMING OPERATIONS; TRANSPORTING
+	C	CHEMISTRY; METALLURGY
+	D	TEXTILES; PAPER
+	E	FIXED CONSTRUCTIONS
+	F	MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
+	G	PHYSICS
+	H	ELECTRICITY



	-	A43	FOOTWEAR
	-	A43B	CHARACTERISTIC FEATURES OF FOOTWEAR; PARTS OF FOOTWEAR
			<u>Characteristic features of footwear</u>
D	-	A43B 1/00	Footwear characterised by the material [2006.01]
A	-	A43B 1/02	• made of fibres or fabrics made therefrom [2022.01]
		A43B 1/023	• • Animal fibres [2022.01]
		A43B 1/025	• • Plant fibres [2022.01]
		A43B 1/028	• • Synthetic or artificial fibres [2022.01]
A		A43B 1/04	• • braided, knotted, knitted or crocheted [2022.01]
		A43B 1/05	• • woven [2022.01]
D		A43B 1/06	• made of wood, cork, card-board, paper or like fibrous material [2006.01]
D		A43B 1/08	• made of metal [2006.01]
D	-	A43B 1/10	• made of rubber [2006.01]
		A43B 1/12	• • of rubber waste [2006.01]
D		A43B 1/14	• made of plastics (A43B 1/028 takes precedence) [2006.01]



Citation tracing

- Starting from a single patent, check out the patents it has cited and other patents that have cited it
- A quick and powerful way to identify relevant patents
- Platforms such as Google Patents makes it easy to trace



CA2711897C
Canada

Download PDF Find Prior Art Similar

Other languages: [French](#)
Inventor: [Timothy A. Skiba](#)
Current Assignee : [Safco Products Co](#)

Worldwide applications
2009 • [US](#) [CA](#) [MX](#) [WO](#) [EP](#) [CN](#) 2011 • [US](#)

Application CA2711897A events ⓘ
2008-01-11 • Priority to US1078808P
2009-01-09 • Application filed by Safco Products Co
2009-07-16 • Publication of CA2711897A1
2016-03-29 • Application granted
2016-03-29 • Publication of CA2711897C
Status • Active
2029-01-09 • Anticipated expiration
[Show all events](#) ▾

Info: [Patent citations \(39\)](#), [Cited by \(45\)](#), [Legal events](#), [Similar documents](#), [Priority and Related Applications](#)
External links: [Espacenet](#), [Global Dossier](#), [CIPO](#), [Discuss](#)



Major Patent Platforms

	Google Patents	Canadian Patents Database	Espacenet	Patentscope
Office/body	Google	Canadian Intellectual Property Office	European Patent Office	World Intellectual Property Office
Coverage	USA and worldwide	Canada	Europe and worldwide	Worldwide
Overall	Easy to start, excellent keyword search and citation tracing	Good for searching in the Canadian context	Good classification search and advanced search	Different searching and browsing functions

Try it out

1. In Google Patents, can you find the US patent for Rubik's cube?
What was the original name of this invention stated on the patent?
2. In Espacenet, how would you search for patents by the company Apple Inc? How about by the company Tesla?
3. In both Google Patents and Espacenet, with a combination of keyword searching, classification searching and browsing, can you identify a range/code from the IPC that is an area of your interest?

Useful Resources

- [Online Learning Modules by Canadian Intellectual Property Office](#)
- [World IP Day: A primer on Canadian intellectual property rights](#)
- [The Basics of Patent Information](#)
- [Patents and Designs by Queen's University Library](#)
- [Patents Guide by University of Iowa Libraries](#)
- [Patent FAQ by a law firm](#)

List of Patent Drawings Featured

- [Adjustable hockey stick \(US5609336A\)](#)
- [Beerbrella \(US6637447B2\)](#)
- [Chesslike game \(US3610626A\)](#)
- [Desk mounted vertically adjustable stand up desk \(US9332839B2\)](#)
- [Man t-shirt for running \(EP2903467B1\)](#)
- [Patent Picks – Weird and Wonderful \(2018\)](#)
- [Patent Picks – Weird and Wonderful \(2020\)](#)
- [Scooter \(JP6996773B2\)](#)
- [Sneaker or similar article \(USD319718S\)](#)
- [Systems and methods for wireless authorization at a vending machine \(US10380822B2\)](#)
- [Toilet-paper roll \(US465588A\)](#)
- [Transformable clothing \(US10499695B2\)](#)
- [Zippered baseball cap \(USD707018S1\)](#)