



Program



- Introduction
- What is Intellectual Property (IP) ?
- Patents
- Trademarks
- Industrial Designs
- IP, how to handle it in your business ?



Rutger Valkonet

Dutch and European patent attorney at AOMB Intellectual Property, High Tech Campus, Eindhoven (NL)

AOMB Intellectual Property • Eindhoven University of Technology

Eindhoven Area, Netherlands • 500+ 

Assisting clients in IP matters in its broadest sense; drafting and prosecuting patent applications; evaluating patent portfolios; performing prior art searches; assisting clients in infringement court proceedings; supporting the establishment of an IP strategy/policy within client's companies; IP education

Fields of technology: physics, optics, semiconductor technology, mechanics, measuring and control engineering, software protection

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Specialties: Expertise in the fields of: medical devices for cancer treatment by means of radiotherapy, artificial sports fields, weaving, bone implants, image sensor devices, processes for manufacturing semiconductor devices, industrial pump systems, packaging, gaming devices, software related inventions [See less](#)

The patent attorney

operates on the cross road of science, law and business

Is NOT authorized to grant a patent, but is

- legally authorized specialist
- scientific/legal advisor in the protection of innovation (patents, trademarks, designs, copyright, software)
- acts on behalf of the inventor/company/university
- sworn in after qualifying/client-attorney privileged/secrecy



Program

- Introduction
- **What is Intellectual Property (IP) ?**
- Patents
- IP, how to handle it in your business ?
 - How to search for patents

Intellectual Property

A bundle of national/supranational legislation designed for the protection of innovation:

- Patents (technical functionality)
- Trademarks (branding of products/services)
- Industrial designs (aesthetics of utility products)
- Copyright (creation of original work)
- Plant breeders right (new variety of a plant or flower)



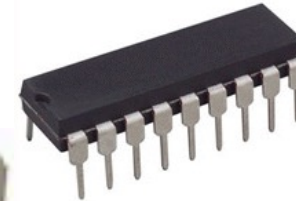
SAMSUNG



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AOMB Intellectual property

Nintendo®



Program

- Introduction
- What is Intellectual Property (IP) ?
- **Patents**
- IP, how to handle it in your business ?
 - How to search for patents

What is a patent ?

- *National exclusive right, which protects an invention (product, method/process) against copying (infringement) for a maximum period of 20 years*

What can you with a patent right ?

- Protection your market share or position
- Selling/hiring/licensing of your product/method/process
- Cooperating with other companies (your patent can serve as a negotiation asset)

What type of innovations can become the subject of a patent right ?

- An apparatus/device
- A manufacturing method/process
- The product obtained with the method/process
- The use of the product

What is excluded from patent protection ?

- A discovery (of a new plant in the jungle)
- Scientific or mathematical theory
- Business methods (e-commerce, simple supply and demand)
- Computer programs (software = copyright)

What are the requirements for an innovation to be patented ?

1. Industrial applicable
2. Reproducible (no perpetual motion)
3. Novel (not known to the public)
4. Inventive (non obvious improvement)

How does innovation work ?



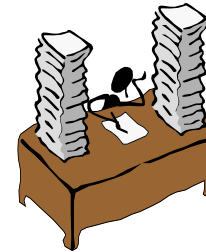
Problem



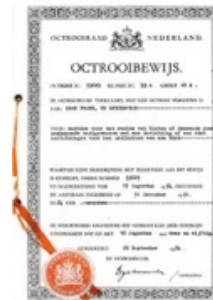
Solution (invention)



Patent application



Granted patent !



Program

- Introduction
- What is Intellectual Property (IP) ?
- Patents
- **IP, how to handle it in your business ?**
 - **How to search for patents**

IP, how to handle it in your business ?

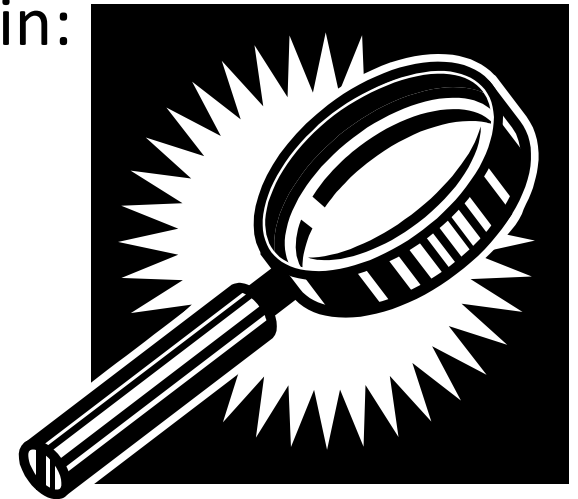
- Protection/expanding your market share or position
 - Increase of net profit
 - Attracting new investors
- Selling/hiring/licensing of your product/method/process
- Cooperating with other companies (your IP can serve as a negotiation asset)
- Blocking or banning your competitors (See you in court !)
- Identity, image building, reputation

Novelty

Not **publicly** known prior to the filing date of the patent application.

In other words, no known from or disclosed in:

- Other patent applications/patents
- Technical papers
- Product information
- Oral presentations
- Internet
- Products on the market
- Own publications (of the product or on website) !!



The concept of searching for patents

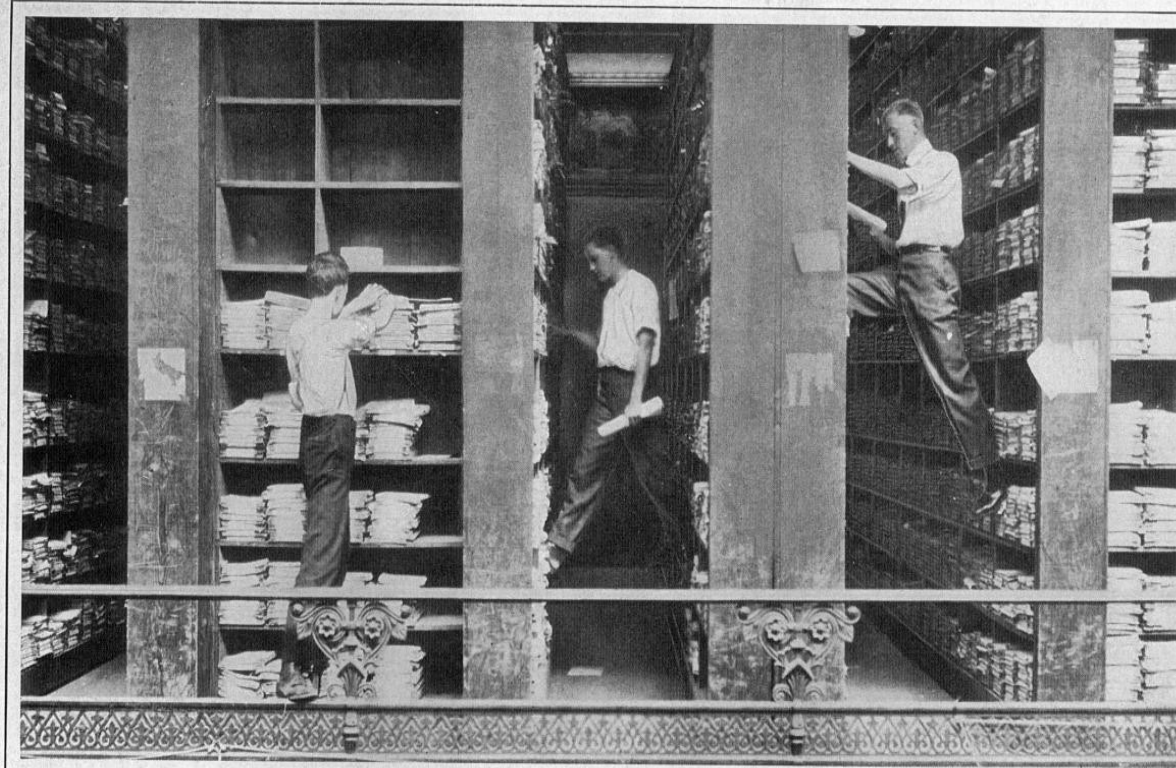
How does it work ?

Is an idea already filed as a patent or not ?

In other words:

Is my idea already known in the prior art ?

Early 20th century novelty search for “Prior Art” using hardcopy database



SEARCHING THE FILES IN THE PATENT OFFICE.

Early 21st century novelty search for “Prior Art” using digital database



Prior Art Literature Search



- State of the art
- Novelty
- Freedom-to-operate
- Competition
- Bibliometric (patent number, applicant/inventor name, keywords, technical patent classification)

Electronic Sources of Prior Art

- Electronically searchable literature
- Accessible via the internet
 - Free of charge, or commercial, specialized
 - Combined with easy-to-use search tools (boolean)
 - Instant updating
 - Large coverage for most important countries
- Optical Data Carriers (outdated)

Electronic Sources of Prior Art



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full text, US-class, IPC-class

WIPO

<http://www.wipo.int/pctdb/en/>

International applications

Full text, IPC

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Type in 'US5255452'



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Smooth Criminal Patent - 1



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1. >

☆ US5255452A Method and means for creating anti-gravity illusion

Patent Translate ▾

Bibliographic data Description Claims Drawings Original document Citations Legal events Patent family

Applicants TRIUMPH INTERNATIONAL INC [US] +
Inventors BUSH MICHAEL L [US]; JACKSON MICHAEL J [US]; TOMPKINS DENNIS [US] +

Classifications

IPC A43B3/00; B64G6/00; (IPC1-7): A43B3/00; A43B5/00;

CPC A43B3/00 (EP); B64G6/00 (EP);

Priorities US90547992A·1992-06-29

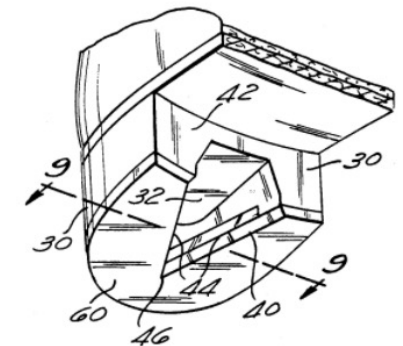
Application US90547992A·1992-06-29

Publication US5255452A·1993-10-26

Published as US5255452A



Front-page drawing from US5255452A



Smooth Criminal Patent - 2



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US005255452A

United States Patent [19]

Jackson et al.

[11] **Patent Number:** **5,255,452**

[45] **Date of Patent:** **Oct. 26, 1993**

[54] **METHOD AND MEANS FOR CREATING
ANTI-GRAVITY ILLUSION**

[75] **Inventors:** **Michael J. Jackson, Los Angeles;**
Michael L. Bush; Dennis Tompkins,
both of Hollywood, Calif.

| | | | |
|-----------|---------|----------------------|--------|
| 3,889,399 | 6/1975 | Emrich | 36/1 |
| 4,445,287 | 5/1984 | Garcia | 36/114 |
| 4,538,480 | 9/1985 | Trindle | 36/131 |
| 4,645,466 | 2/1987 | Ellis | 36/132 |
| 4,762,019 | 8/1988 | Beyl | 36/131 |
| 4,882,858 | 11/1989 | Signori | 36/131 |
| 5,042,173 | 8/1991 | Blizzard et al. | 36/113 |

Primary Examiner—Steven N. Meyers

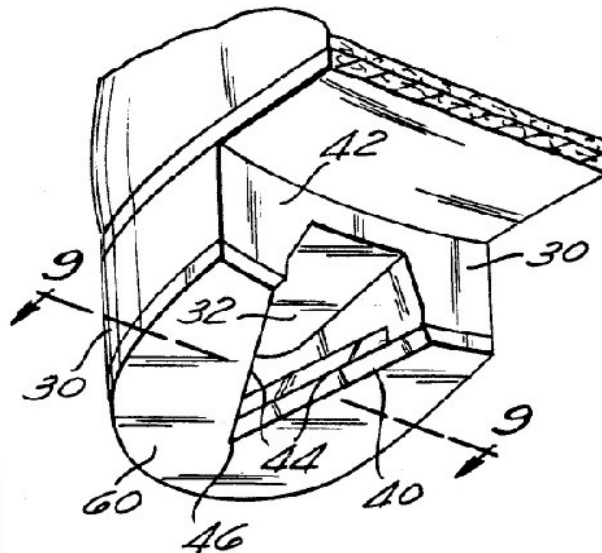
Assistant Examiner—M. Denise Patterson

Attorney, Agent, or Firm—Drucker & Sommers

[57] **ABSTRACT**

A system for allowing a shoe wearer to lean forwardly beyond his center of gravity by virtue of wearing a specially designed pair of shoes which will engage with a hitch member movably projectable through a stage surface. The shoes have a specially designed heel slot which can be detachably engaged with the hitch member by simply sliding the shoe wearer's foot forward, thereby engaging with the hitch member.

13 Claims, 4 Drawing Sheets



Smooth Criminal Patent - 3

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Interpretation of search results

- Bibliographic data
- Description, Claims, Drawings
- Original document (WYSIWYG)
- Patent family
- Status (in force, granted, lapsed)
- Inpadoc
- Epoline

Setting up a search yourself

- Use patent classification
- Use technical search terms
- Use bibliographic data
 - ☐ Company name
 - ☐ Inventor
 - ☐ Patent no.

Setting up a search strategy


1. Identify the technical concepts best describing the idea
2. Determine subclasses from classification search
3. Choose search terms corresponding to the concepts
4. Search using subclass combined with search terms
5. Repeat 3, 4 for alternative search terms and subclass

Example 1

Novelty search

- Problem:
 - I would like to listen to the radio whilst taking a shower, but do not want to be electrocuted.
- Solution:
 - Use special generator in water flow for generating electrical power.
- Novelty ?
 - Find patents which describe this idea (or not)

Approach: Use patent classification

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| Classification symbol | Title and description | |
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| <input type="checkbox"/> B | PERFORMING OPERATIONS; TRANSPORTING | S ⓘ |
| <input type="checkbox"/> C | CHEMISTRY; METALLURGY | S ⓘ |
| <input type="checkbox"/> D | TEXTILES; PAPER | S |
| <input type="checkbox"/> E | FIXED CONSTRUCTIONS | S |
| <input type="checkbox"/> F | MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING | S ⓘ |
| <input type="checkbox"/> G | PHYSICS | S ⓘ |
| <input type="checkbox"/> H | ELECTRICITY | S ⓘ |
| <input type="checkbox"/> Y | GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS | S ⓘ |

Selected classifications

Find patents

Classification


Classes and subclasses


A47K3/281







| | |
|-----------|--|
| A | Human necessities |
| A47 | Furniture |
| A47K | Sanitary equipment |
| A47K3 | Baths, douches, appurtenances therefor |
| A47K3/28 | Shower |
| A47K3/281 | Accessories for showers or bathing douches |

1830 are too many results


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Patent search



cpc = "A47K3/281/low" 



Office/Language 


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

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AND  + Field 

CPC  = 

A47K3/281/low 




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1 830 results found

List view List content Sort by

Text only  All  Relevance 

☐ (0 patents selected) **Select the first 20 results**

☐ 1. **Multifunctional elderly-helping bathing device**
CN11254534 1A • 2021-03-26 • UNIV HUNAN ARTS & SCIENCE
Earliest priority: 2020-12-10 • Earliest publication: 2021-03-26
The invention discloses a multifunctional bathing device for helping the aged. The device comprises a fixed shower nozzle, a towel storage cylinder, a towel storage cylinder bracket, a backrest fixingplate and the like, wherein the fixed shower nozzle is fixedly connected with a shower nozzle bracket through

☐ 2. **Constant-temperature wrapping type press photosensitive spraying shower**
CN111905939A • 2020-11-10 • GUANGZHOU SEAGULL HOUSING IND CO LTD
Earliest priority: 2020-08-28 • Earliest publication: 2020-11-10
The invention discloses a constant-temperature wrapping type press photosensitive spraying shower. The constant-temperature wrapping type press photosensitive spraying shower comprises a fixing base,a handheld shower head, a pair of side arms and a water way system. Multiple spraying nozzles

☐ 3. **Home care equipment system**
AU2005277503A1 • 2006-03-02 • DAVID SCHWANEMANN
Earliest priority: 2004-08-16 • Earliest publication: 2006-03-02
No abstract available

So reduce your search results



Activate the 'Advanced Search' switch

Add an additional search field using the '+ Field' option

Select 'Title, abstract or claims' from the pull down


Select 'Any' (for the additional search terms) from the pull down


Use Boolean 'Radio OR generator'


Result 54 possible results.

Select the first one 'US514025A' BINGO !

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Patent search

cpc = "A47K3/281/low" AND ctxt any "radio OR generator" 

Office/Language 

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Query language: en de fr AND  + Field

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A47K3/281/low 

Title, abstract or claims  any 

radio OR generator 

→ Group

→ Group

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54 results found

List view Text only  List content All  Sort by Relevance ☐ (0 patents selected) **Select the first 20 results**☐ 1. Shower accessory 
US5140254A • 1992-08-18 • KATZMAN DAVID [US]
Earliest priority: 1990-10-10 • Earliest publication: 1992-08-18
... also flows through the fluid passageway. An electrically powered device, such as a radio, is contained within the housing. Additionally, an impeller coupled to a generator is positioned within the fluid passageway. The electrical outlet from the generator is connected to the radio so that fluid flow through☐ 2. Intelligent shower system based on STM32
CN105902217A • 2016-08-31 • UNIV ANHUI
Earliest priority: 2016-03-23 • Earliest publication: 2016-08-31
... device, a shower damage detection device, a carbon dioxide sensor device, a water price gradient estimating device, a radio frequency... sensor device, the water price gradient estimating device and the radio frequency device are connected with the main control system... redundancy check generator. The☐ 3. Voice-informing system for steam generator of shower booth and the method thereof
KR100528430B1 (A) • 2005-11-15 • YIM YOUNG SHIK
Earliest priority: 2002-08-14 • Earliest publication: 2004-02-21
...PURPOSE: Provided is a voice system for a steam generator of a shower booth and a control method therefor, to... system for a steam generator(9) of a shower booth includes a voice memory(15) for

Select the relevant patent for details



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1. >

☆ **US5140254A** Shower accessory

Patent Translate ▾ ⋮

Bibliographic data Description Claims Drawings **Original document** Citations Legal events Patent family

Applicants KATZMAN DAVID [US] +

Inventors KATZMAN DAVID [US] +

Classifications

IPC **A47K3/28**; **F03B13/00**; **H02K7/18**; (IPC1-7): H02P1/00;

CPC **A47K3/281 (EP)**; **F03B13/00 (EP)**; **H02K7/1823 (EP)**; B05B1/18 (EP); F05B2220/20 (EP); F05B2220/60 (EP); Y02B10/50 (EP);

Priorities US59720190A·1990-10-10

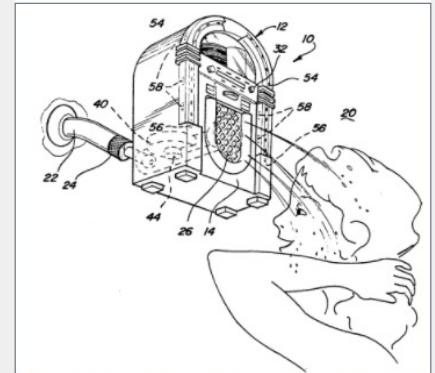
Application US59720190A·1990-10-10

Publication US5140254A·1992-08-18

Published as US5140254A



Front-page drawing from US5140254A



Listen to the radio whilst showering

United States Patent [19]
Katzman

[11] **Patent Number:** **5,140,254**
[45] **Date of Patent:** **Aug. 18, 1992**

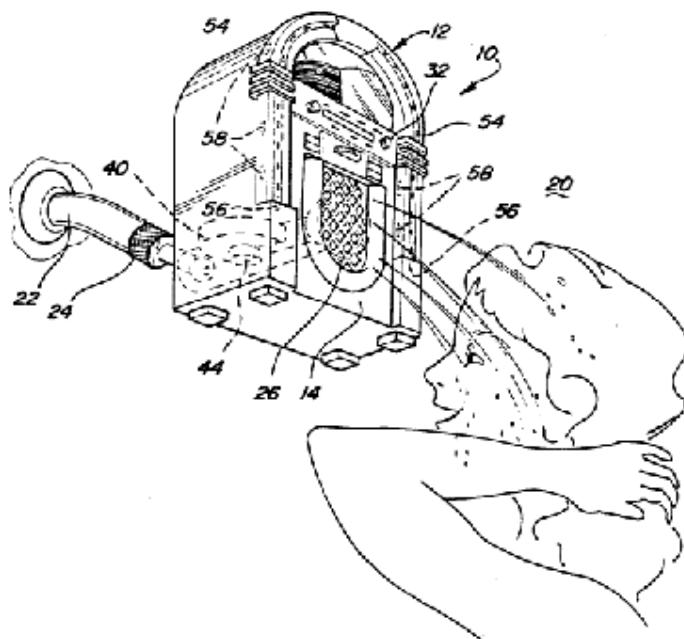
[54] **SHOWER ACCESSORY**

Assistant Examiner—Thomas M. Dougherty
Attorney, Agent, or Firm—Gifford, Groh, Sprinkle,
Patmore and Anderson

[57] **ABSTRACT**

An accessory is provided for a shower having a shower outlet. The accessory includes a housing having a front, a back and a fluid passageway extending between the front and the back of the housing. The housing is attached to the water outlet so that the fluid passageway registers with the outlet and so that water flow through the outlet also flows through the fluid passageway. An electrically powered device, such as a radio, is contained within the housing. Additionally, an impeller coupled to a generator is positioned within the fluid passageway. The electrical outlet from the generator is connected to the radio so that fluid flow through the fluid passageway drives the impeller and its attached generator in order to electrically power the radio.

1 Claim, 1 Drawing Sheet



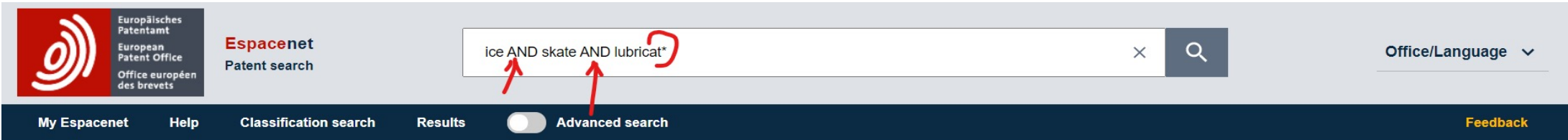
Example 2

Novelty search



- Problem:
 - Ice skating on a sandy frozen lake, makes the skate blade dull and the skater loses speed.
- Solution:
 - Use special special blade design that contains a lubrication for supplying the lubricating to the blade.
- Novelty ?
 - Find patents which describe this idea (or not)

Approach 1: Use technical search terms




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Use AND and the asterix character to search for:

- lubricate
- lubricating
- lubrication
- lubricant

An illustration of a computer monitor displaying multiple overlapping patent search results. A play button icon is overlaid on the screen, suggesting a video or interactive content.

Still (too) many results

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Patent search

ice AND skate AND lubricat*

Office/Language ▼

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☐ (0 patents selected) Select the first 20 results

☐ 1. Novel ice skate blade drag reduction technology and implementation method thereof
CN109972097A • 2019-07-05 • UNIV NORTH CHINA TECHNOLOGY

Earliest priority: 2019-04-09 • Earliest publication: 2019-07-05

...The invention provides a novel ice skate blade drag reduction technology and an implementation method thereof, aiming at the dynamic... implementation method, through surface modification treatment on an ice skate blade substrate, the heat conductivity coefficient of an ice skate blade...

☐ 2. Skating rink and skating shoe for same

CN107376316A • 2017-11-24 • LU HAORAN

Earliest priority: 2017-09-05 • Earliest publication: 2017-11-24

... a piece of tempered glass (1) or a plurality of pieces of tempered glass (1); a lubricating film (4) is...

(5). The texture ice skate blade (3) comprises an ice skate blade support (6) and a bottom plate (7),

the... the skating shoe have the advantages that water-ice floors and ice skating sports on the water-ice


☐ 3. ICE SKATE BLADE

CA1125804A • 1982-06-15 • PFZ ENTERPRISES INC

Earliest priority: 1979-06-07 • Earliest publication: 1982-02-09

ICE SKATE BLADE

Approach 1: Add extra search term

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ice AND skate AND lubricat AND supply*

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☐ 7. **CLEANING AND CONDITIONING CLOTH**
CA2724118A1 • 2011-06-24 • HUANG CHUNLEI [US]

Earliest priority: 2009-12-24 • Earliest publication: 2011-06-24

...A cleaning and conditioning cloth for an ice skate, including hockey and speed skates, as well as other objects, includes... ice skate in the other, placing the blade of the ice skate in the middle of the oil impregnated fabric, and moving the ice skate and the cleaning and conditioning cloth relative to each

☐ 8. **Lubricating method for ice skate, comprises supplying lubricant to glide surface as ...**

NL1020897C1 • 2003-12-19 • BEUKER CHRISTIAAN [NL]

Earliest priority: 2002-06-18 • Earliest publication: 2003-12-19


...Lubricant is supplied to and distributed over the glide surface as the object is gliding over the ice. Independent claims are also included for the following: ice-skate or sledge with at least lubricant channel (5a, 5b) extending between the glide surface and a lubricant reservoir; and Lubricant for supplying to

☐ 9. **Cleaning and Conditioning Cloth**


US2011155171A1 • 2011-06-30 • No applicant available

Earliest priority: 2009-12-24 • Earliest publication: 2011-06-30

...A cleaning and conditioning cloth for an ice skate, including hockey and speed skates, as well as other objects, includes... ice skate in the other, placing the blade of the ice skate in the middle of the oil impregnated fabric, and moving the ice skate and the cleaning and conditioning cloth relative to each

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Approach 2: Use patent classification

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| <input type="checkbox"/> B | PERFORMING OPERATIONS; TRANSPORTING | S  |
| <input type="checkbox"/> C | CHEMISTRY; METALLURGY | S  |
| <input type="checkbox"/> D | TEXTILES; PAPER | S |
| <input type="checkbox"/> E | FIXED CONSTRUCTIONS | S |
| <input type="checkbox"/> F | MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING | S  |
| <input type="checkbox"/> G | PHYSICS | S  |
| <input type="checkbox"/> H | ELECTRICITY | S  |
| <input type="checkbox"/> Y | GENERAL TAGGING OF NEW TECHNOLOGICAL DEVELOPMENTS; GENERAL TAGGING OF CROSS-SECTIONAL TECHNOLOGIES SPANNING OVER SEVERAL SECTIONS OF THE IPC; TECHNICAL SUBJECTS COVERED BY FORMER USPC CROSS-REFERENCE ART COLLECTIONS [XRACs] AND DIGESTS | S  |


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Classification

Classes and subclasses

A63C1/32

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CPC



[...]

2000

2000

« A63C A63C3/00 »


| Classification symbol | Title and description | |
|--|--|---|
| <input type="checkbox"/> A | HUMAN NECESSITIES |  |
| | HEALTH; AMUSEMENT | |
| <input type="checkbox"/> A63 | SPORTS; GAMES; AMUSEMENTS | |
| <input type="checkbox"/> A63C | SKATES; SKIS; ROLLER SKATES; DESIGN OR LAYOUT OF COURTS, RINKS OR THE LIKE (water skis B63B 32/00 , B63B 34/00) |    |
| | Skates; Accessories for skating | |
|  <input type="checkbox"/> A63C 1/00 | Skates (roller skates or skate boards A63C 17/00) |  |
| <input type="checkbox"/> A63C 1/30 | • with special blades |  |
| <input type="checkbox"/> A63C 1/32 | •• Special constructions of the simple blade |  |


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☐ 1. **CONNECTOR SYSTEM FOR SINGLE OR MULTIPLE ROW SKATING DEVICES.**
EP0609347A1 • 1994-08-10 • FORTHUBER GUENTER [AT]
Earliest priority: 1991-10-25 • Earliest publication: 1993-04-29
Un système de fixation pour dispositifs de patinage à une ou plusieurs rangées de roulettes ou de lames, notamment des chaussures, comprend un support (1) de réception de roulettes ou de lames (18). Le support (1) comprend au moins une douille coulissante tubulaire sensiblement parallèle au plan

☐ 2. **Blade for hockey skates**
US4744574A • 1988-05-17 • SOO MIKE [TW]
Earliest priority: 1986-06-12 • Earliest publication: 1988-05-17
A blade for ice hockey skates comprising a plurality of slanted slots which are symmetrically provided on the top edge of the blade. Each opening of the slots faces upward and toward the center line of the blade. Each of remaining materials between two adjacent slanted slots, and between either of the ends

☐ 3. **No title available**
US216159A • 1879-06-03 • No applicant available
Earliest publication: 1879-06-03
No abstract available

BINGO !

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cpc = "A63C1/32/low" AND ctxt any "lubricat**"

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lubricat* ×

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☐ 1. **Lubricating** method for ice skate, comprises supplying lubricant to glide surface as o...
NL1020897C1 • 2003-12-19 • BEUKER CHRISTIAAN [NL]
Earliest priority: 2002-06-18 • Earliest publication: 2003-12-19
Lubricant is supplied to and distributed over the glide surface as the object is gliding over the ice.
Independent claims are also included for the following: Ice-skate or sledge with at least lubricant channel (5a, 5b) extending between the glide surface and a lubricant reservoir; and Lubricant for supplying to the

☐ 2. **Ice skate blade**
US4314708A • 1982-02-09 • PFZ ENTERPRISES INC
Earliest priority: 1979-06-07 • Earliest publication: 1982-02-09
An ice skate blade having an elongated flat blade body defining opposed side walls and a support bottom edge having a slot in at least a forward half portion thereof intermediate the opposed side walls. The rear portion is a solid support portion.

Hollow blade with lubrication

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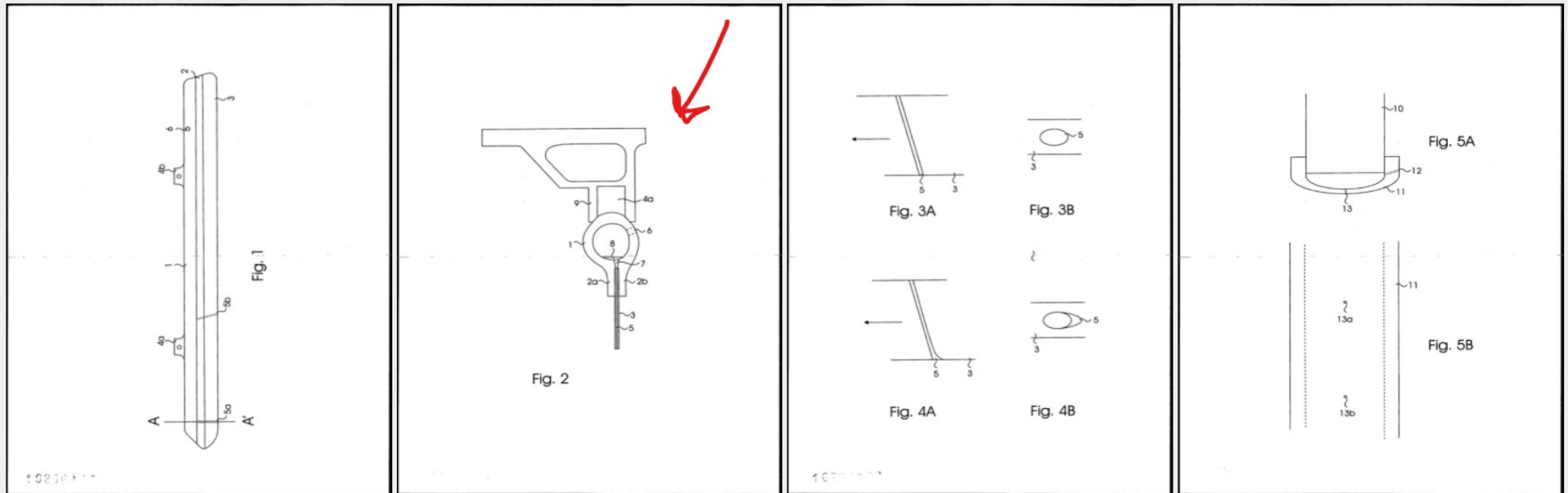
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1. >

☆ **NL1020897C1** Lubricating method for ice skate, comprises supplying lubricant to glide surface as object glides over ice

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