Patent Classification

Advantages

Monika Zikova
Project Officer

Webinar
July 11 and 12, 2013
Overview

- Classification systems
- Classification of patents
- Advantages and disadvantages of patent classification
Webinar: Asking questions
Webinar: Asking questions

→ Enter your question
Webinar: Asking questions

→ Press "Send"
Webinar: Asking questions

See your questions and answers
Case example: Library

- You go to a library to do research on machine translation methods.
- How would you find books on this topic?
Searching by title: challenges

- Search books by title?
- Challenges:
  - Synonyms and related terms - ‘natural language processing’, ‘computational linguistic’ or ‘human language technology’
  - Technical jargon - ‘statistical inference algorithms’
  - Language barriers
# DEWEY DECIMAL CLASSIFICATION SYSTEM

## Main Classes and Selected Subdivisions

<table>
<thead>
<tr>
<th>000's – General Works</th>
<th>700's – The Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>Architecture</td>
</tr>
<tr>
<td>Encyclopedias</td>
<td>Drawing</td>
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<tr>
<td>Journalism</td>
<td>Photography</td>
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<td>Manuscripts</td>
<td>Music</td>
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<table>
<thead>
<tr>
<th>100's – Philosophy</th>
<th>800's – Literature</th>
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<tbody>
<tr>
<td>Psychology</td>
<td>Poetry</td>
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<td>Ethics</td>
<td>Essays</td>
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<td>Logic</td>
<td>Drama</td>
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<tr>
<td>Learning</td>
<td>Other Literature</td>
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<table>
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<tr>
<th>200's – Religion</th>
<th>900's – History</th>
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<td>Travel</td>
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<td>Theology</td>
<td>Biography</td>
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<tr>
<td>Other Religions</td>
<td>General Geography</td>
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<table>
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<tr>
<th>300's – Social Sciences</th>
<th>F – Fiction</th>
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<tr>
<td>Sociology</td>
<td>J – Juvenile</td>
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<td>Law</td>
<td>R – Reference</td>
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<td>Economics</td>
<td>SC – Story Collection</td>
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<tr>
<td>Education</td>
<td>VT – Video Recordings</td>
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<table>
<thead>
<tr>
<th>400's – Languages</th>
<th>DVD – DVD Recording</th>
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<tr>
<td>Grammar</td>
<td>Medicine</td>
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<tr>
<td>Reading Skills</td>
<td>Engineering</td>
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<tr>
<td>Other Languages</td>
<td>Business</td>
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<tr>
<td>Dictionaries</td>
<td>Agriculture</td>
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<table>
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<tr>
<th>500's – Pure Science</th>
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<td>Mathematics</td>
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<td>Physics</td>
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<td>Botany</td>
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<td>Chemistry</td>
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<th>600's – Technology</th>
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<tbody>
<tr>
<td>Medicine</td>
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<tr>
<td>Business</td>
</tr>
<tr>
<td>Engineering</td>
</tr>
<tr>
<td>Agriculture</td>
</tr>
</tbody>
</table>
0 Computer science, information & general works
00 Computer science, knowledge & systems
004.006 Special computer methods
004.006.35 Natural language processing: Special
        Computer methods related to processing of language

410.285 Linguistics, computational linguistics combined with 418.02 Translating
Advantages of classification

- Simplify life
- Help to find information
- Serve as reference tool → generate knowledge
Classification of patents

- Ordering and more efficient retrieval
- To help patent examiners and other users
(51) Classification internationale des brevets:
G04B 27/02 (2006.01)  G04B 19/25 (2006.01)
G04B 33/06 (2006.01)
Case example: Watches

- Use International Patent Classification
- Locate and analyze classification code **G04B 33/06**
  → Extremely flat caliber watches
The structure of the IPC

- Section A – Human Necessities
- Section B – Performing Operations; Transporting
- Section C – Chemistry; Metallurgy
- Section D – Textiles; Paper
- Section E – Fixed Constructions
- Section F – Mechanical Engineering; Lighting; Heating; Weapons; Blasting
- Section G – Physics
- Section H – Electricity
The structure of the IPC

G Physics

G04 Horology

G04B Mechanically-driven clocks

G04B 33 Calibers

G04B 33/06 Extremely flat
Layout of classification symbols

<table>
<thead>
<tr>
<th>Section</th>
<th>Class</th>
<th>Subclass</th>
<th>Main Group</th>
<th>Sub-Group</th>
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<td>04</td>
<td>B</td>
<td>33</td>
<td>/</td>
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<td>HORLOGY</td>
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<tr>
<td>MECHANICALLY-DRIVEN CLOCKS</td>
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<tr>
<td>CALIBERS</td>
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<tr>
<td>FLAT CALIBERS</td>
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</table>
IPC internet publication

http://www.wipo.int/ipcpub
### Calibers
- Circular calibers
- Non-circular calibers
- Of extremely flat shape

- In which the gear train is arranged in different planes, e.g. parallel or inclined to each other (G04B 33/10 takes precedence)
Other patent classification systems

- File Index (FI)/F-terms
  - Japan

- Cooperative Patent Classification (CPC)
  - EPO, USA, UK, Spain, Sweden, China

- Commercial database producers
  - e.g. Derwent Classification System
Advantages of patent classification

- Applied in a standardized manner
- Available for all (almost) patent documents
- Available for old patent documents for which little or no searchable text is available
Patent classification vs. keywords

- Terminology and jargon independent (including changes in terms used over time)
- Context and language independent

→ A more complete and precise search
Case Example: Helmets

- Search in PATENTSCOPE all WO documents
- Compare keyword and classification search
Search in PATENTSCOPE all WO documents with keyword ‘helmet*’
Quick keyword search

Using PATENTSCOPE you can search 30 million patent documents including 2.2 million published international patent applications (PCT). Detailed coverage information can be found here [->].

Front Page helmet*
The invention concerns a safety helmet, in particular for cyclists, which includes a self-contained portable semi-shell helmet (H), on which an integral part (1) enclosing the chin and the occipital area can be fixed in a detachable way. The semi-shell helmet (H) is equipped as a self-contained helmet with a chin strap fastening and air that belongs to known helmets. This hence enables, depending on the intended use, only to wear the upper helmet part or the assembled integral helmet.

The invention relates to signalling equipment for motorcycle users, in which the equipment is any element worn by the user, such as jackets, trousers, boots, helmets or gloves, which includes at least the following subunit elements: signalling elements (5), a microcontroller (3), a wireless receiver element (2) and a photovoltaic fabric (6), wherein at least one wireless transmitter element (1) in contact with a switch of the signal of the motorcycle to be activated sends a signal to the wireless receiver element (2), ordering the microcontroller (3) to activate the signalling elements (5). The equipment can also comprise a battery (7) and an element for connecting to the mains (8) as a complement for the photovoltaic fabric (6).

A headgear accessory attachment apparatus includes a band having an adjustable size for fitting about a circumference of various outdoor sports helmets such as bicycle, skateboarding, snow sport, mountaineering, equestrian helmets, military helmets, and hard hats used in material moving, dock loading, and airport baggage handling. The accessory attachment apparatus provides the wearer an easy means to attach headgear accessories such as headlamps, helmet cameras, rear lights, goggles, visors, brims, and decorative embellishments to the helmet. The accessories may be permanently or temporarily secured to the accessory apparatus. In one headgear accessory attachment apparatus, the band includes a stop surface that opposes a bottom surface of the headgear when the apparatus is affixed to the headgear such that the apparatus is prevented from becoming dislodged during use.
<table>
<thead>
<tr>
<th>Application Number</th>
<th>Filing Date</th>
<th>International Classification</th>
<th>Inventor(s)</th>
<th>Corresponding Database(s)</th>
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<td>18.04.2013</td>
<td>A61F 8/32</td>
<td>McCulloch David</td>
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<td>20130917385</td>
<td>18.04.2013</td>
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<td>Ambani Amar Valli</td>
<td>Ambani Amar Valli</td>
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<tr>
<td>20130919057</td>
<td>18.04.2013</td>
<td>G10K 1/116</td>
<td>University of Connecticut</td>
<td>Branner Anthony John</td>
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**INTERCHANGEABLE LENS GOOGLES ADAPTABLE TO PREVENT FOGGING**

**20130917123 - GOGGLE WITH EASILY INTERCHANGEABLE LENS THAT IS ADAPTABLE FOR HEATING TO PREVENT FOGGING**

**20130917385 - MOTORCYCLE HELMET WITH ELECTRONIC SAFETY FEATURES**

**20130919057 - METHOD AND DEVICE FOR IMPROVING THE AUDIBILITY, LOCALIZATION AND INTELLIGIBILITY OF SOUNDS, AND COMFORT OF COMMUNICATION DEVICES WORN ON OR IN THE EAR**
Search in PATENTSCOPE all WO documents with IPC code for helmets

- Find the best IPC available
- Use IPC code in your search
Finding the ‘right’ code

HELMTS A42B 3/00
- armoured HELMTS; steel HELMTS F41H 1/04
- clear view sheets for HELMTS A62D 7/00
- compositions for transparent parts of HELMTS A62D 7/00
- covers for HELMTS A42B 5/00
- gas HELMTS A62B 18/04
- HELMTS for diving B63C 11/12
- HELMTS for hair drying A45D 20/20, A45D 20/22, A45D 20/44
- HELMTS for swimming A63B 33/00
- manufacturing HELMTS by processes not otherwise provided for A42C 2/00

HELTER-SKELTERS A63G 21/00
Quick classification search

WIPO PATENTSCOPE
Search International and National Patent Collections

Field Combination

AND WIPO Publication Number =
AND Application Number =
AND Publication Date =
AND English Title =
AND English Abstract =
AND Applicant Name =
AND International Class =
AND Inventor Name =
AND Office Code =
AND English Description =
AND English Claims =
AND Licensing availability =
AND Inventor Name =

Language English Stem Office PCT Spycy

976 results

(+) Add another search field | (-) Reset search fields

976 results
Sample results

WO WO/2013/069585 - FLUID RESISTANCE-REDUCING STRUCTURE AND FACE OR HEAD WEAR USING SAIL STRUCTURE

WO WO/2013/030600 - HEAD SUPPORT DEVICE

WO WO/2013/013180 - BIOMECHANICS AWARE PROTECTIVE GEAR
240 documents have neither 'helmet*' nor 'headgear'
Disadvantages of patent classification

- Potentially complex
- May not be
  - detailed enough for all areas of technology
  - available for all documents
  - specific enough for a particular search
  - applied consistently
eTutorial on Patent Information

Useful links and resources

- To know further about IPC, please read Guide to the International Patent Classification at [www.wipo.int](http://www.wipo.int)
- To learn about CPC, please check [www.cpcinfo.org](http://www.cpcinfo.org)
- For patent classification in general:
  - Regional/National patent offices, Intellogist, The British Library etc.
For more about efficient use of patent classification stay tuned!

For general information, please contact tisc@wipo.int
And now, it’s time for questions!