



Basic Patent Searches on free on line
Databases– THEOREM, 11th September 2018

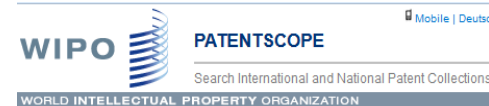
Main Databases for Patent searches

Free-of-charge Databases for patent searches:

- **Espacenet (EPO)**
- **PatentScope (WIPO)**
- **UIBM (IT)**
- **USPTO (US)**
- **J-PLAT-PAT (JP)**
- Google Patents, PatentInspiration, ecc...



Espacenet
Patent search



Fee-paying Patent Search Engines:

www.delphion.com

www.orbit.com

www.derwent.com

www.dialog.com

WARNING!

No patent Database has complete coverage of all patent documents ever published worldwide!!

Patent database - ESPACENET

Key features and Strengths:

✓ **Three search Interfaces:** Smart search, Advanced Search, **Classification Search**;

✓ **COVERAGE:**

- Applications (A) and Granted patents (B) from **over 90 world wide patent authorities** (EP, WIPO, National Offices);
- **Bibliographic data and Legal status information for all docs**;
- Full text: only for docs in English, French and German language;
- Classifications: CPC, IPC;

✓ **SEARCH OPTIONS:**

- Full text Search in English, French and German;
- 10 predefined search fields;
- Boolean Operators, Wild Cards;
- **Forward and Backward citations**;

✓ **LANGUAGE:**

- Interface language: DE, EN FR
- **Automatic translation tool**;

Limits:

- ✗ **Maximum number of search terms per field is 10**;

Smart search
Advanced search
Classification search

Quick help

→ How many search terms can I enter per field?
→ How do I enter words from the title or abstract?
→ How do I enter words from the description or claims?
→ Can I use truncation/wildcards?
→ How do I enter publication, application, priority and NPL reference numbers?
→ How do I enter the names of persons and organisations?
→ What is the difference between the IPC and the CPC?
→ What formats can I use for the publication date?
→ How do I enter a date range for a publication date search?
→ Can I save my query?

Advanced search

Select the collection you want to search in ⓘ

- Worldwide - collection of published applications from 90+ countries
- Worldwide - collection of published applications from 90+ countries
- Worldwide EN - collection of published applications in English**
- Worldwide FR - collection des demandes publiées en Français
- Worldwide DE - Sammlung veröffentlichter Anmeldungen auf Deutsch

Enter keywords

Title: ⓘ plastic and b

Title or abstract: ⓘ

Enter numbers with or without country code

Publication number: ⓘ WO20080

Application number: ⓘ DE2013101

Priority number: ⓘ WO1995US

<http://worldwide.espacenet.com>

Patent database - ESPACENET

❖ Boolean Operators

- AND, OR, NOT

❖ Wildcards and truncation

* car* -> cars, carbon, carriage, carrynig, ...;

car#on -> carton, carbon, ...;

? clock? -> clocks, clock

❖ String search:

“ ” -> “seat belt” The system will retrieve documents having the exact expression “seat belt”;

❖ Date range in publication date search:

: YYYYMMDD: YYYYMMDD

Example: Publication Date 2000:2001 will retrieve all patent and application documents published from 1-Jan-2000 to 31-Dec-2001.

❖ Parentheses to organize complex search queries:

Example: (mouse OR rat) AND (trap OR mousetrap)

Patent database - ESPACENET

The screenshot displays the Espacenet Patent search interface. At the top, the European Patent Office logo and 'Espacenet Patent search' are visible. A navigation bar includes links for 'About Espacenet', 'Other EPO online services', 'Search', 'Result list', 'My patents list (0)', 'Query history', 'Settings', and 'Help'. The 'Result list' tab is active, showing 20 results found in the Worldwide database for the query: (mouse OR rat) AND (trap OR mousetrap) in the title AND US as the application number AND 2010:2016 as the publication date.

On the left, there are sections for 'Smart search', 'Advanced search', 'Classification search', and 'Quick help' with various FAQs.

The main results area shows a table of search results. The first result is 'Safety for mouse trap' (CPC: A01M23/245, IPC: A01M23/30, Priority date: 2004-09-27). The second result is 'Mouse and Rodent Trap' (CPC: A01M23/30, IPC: A01M23/30, Priority date: 2006-08-08). The third result is 'RAT TRAP'.

Annotations on the image include:

- A blue box around the 'Sort by' dropdown menu, which is set to 'Priority date'.
- A blue box around the 'Sort order' dropdown menu, which is set to 'Ascending'.
- A red box around the second result, 'Mouse and Rodent Trap'.

ESPACENET

<http://worldwide.espacenet.com>

NAVIGATION MENÙ

Patent database - ESPACENET

| |
|---------------------------|
| US2010223836 (A1) |
| Bibliographic data |
| Description |
| Claims |
| Mosaics |
| Original document |
| Cited documents |
| Citing documents |
| INPADOC legal status |
| INPADOC patent family |

Quick help

- What is meant by high quality text as facsimile?
- What does A1, A2, A3 and B stand for after a European publication number?
- What happens if I click on "In my patents list"?
- What happens if I click on the "Register" button?
- Why are some sidebar options deactivated for certain documents?
- How can I bookmark this page?
- Why does a list of documents with the heading "Also published as" sometimes appear, and what are these documents?
- Why do I sometimes find the abstract of a corresponding

Bibliographic data: US 2010 223836 (A1) — 2010-09-09

★ In my patents list Previous ◀ 2 / 20 ▶ Next ⓘ Global Dossier ⓘ Report data error ⓘ Print

Mouse and Rodent Trap

Page bookmark [US2010223836 \(A1\) - Mouse and Rodent Trap](#)

Inventor(s): MAHONY MICHAEL J [AU] ±

Applicant(s):

Classification: - international: [A01M23/30](#)- cooperative: [A01M23/30](#)Application number: [US20070376480](#) 20070807Priority number(s): [AU20060904287](#) 20060808 ; [WO2007AU01106](#) 20070807Also published as [US7908790 \(B2\)](#) [WO2008017110 \(A1\)](#) [AU2007283447 \(A1\)](#) [AU2007283447 \(B2\)](#)

Abstract of US2010223836 (A1)

Translate this text into ⓘ

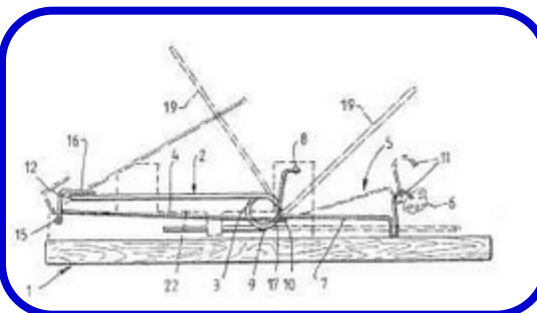
Select language



patenttranslate

powered by EPO and Google

A rodent trap includes a base, a hoop pivoting relative to the base having a first and a second position, a bias arrangement, a retaining bar pivoting relative to the base and having a setting and a releasing position, a release arrangement comprising an over-centre pivotally mounted keeper having first and second positions, the retaining bar including a locking lip to retain the hoop in a first set position when the retaining bar is in the setting position, the release arrangement for mounting a bait and release the retaining bar when subject to an upward force on the bait, the retaining bar automatically set to the setting position by drawing the hoop down onto the retaining bar against the bias and the retaining bar engaging a retaining lip of the release arrangement.



Patent documents
with the same
priorities

Automatic
translation tab

First page
Drawing

ESPACENET

<http://worldwide.espacenet.com>

Patent database - PATENTSCOPE

WIPO PATENTSCOPE

Search International and National Patent Collections

WORLD INTELLECTUAL PROPERTY ORGANIZATION

Search Browse Translate Options News Login Help

Home IP Services PATENTSCOPE

Field Combination

| | | | |
|-----|-------------------------|---|--------------------------|
| | Front Page | = | |
| 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 | = | <input type="checkbox"/> |
| AND | Inventor Name | Is Empty: <input checked="" type="radio"/> N/A <input type="radio"/> Yes <input type="radio"/> No | |

Language: English Stem: ☒ Office: All 0 results Search

(+) Add another search field (-) Reset search fields Tooltip Help

Key features and Strengths:

✓ **Four search Interfaces:** Simple search, Advanced Search, Field Combination, Cross Lingual Information Retrieval-CLIR;

✓ **COVERAGE:**

- Applications and Granted Patents from Africa, US, CA, LatIPat, Asia-Europe (43 world wide authorities);
- Full Text Search for PCT documents
- Classifications: IPC;

✓ **SEARCH OPTIONS:**

- 55 predefined search fields;
- Boolean and Proximity Operators, Wild Cards

✓ **LANGUAGE:**

- Interface language: 9 languages
- Automatic translation tool;

✓ **VISUALIZATION FORMAT:**

- First page Drawing;
- Graphical Results Analysis;
- Search terms highlighted in the records list;

Limits:

- ✗ No citations;

PATENT SCOPE

<http://patentscope.wipo.int/search/en/search.jsf>

Patent database - PATENTSCOPE

❖ Main Boolean Operators:

- AND, OR, NOT, ANDNOT

❖ Wildcards and truncation:

* , car* -> cars, carbon, carriage, carrynig, ...;

?, car?on -> carton, carbon, ...;

❖ Phrases search:

“ ” , "seat belt" -> The system will retrieve documents having the exact expression seat belt;

❖ Date range in publication/application/... date search:

“01.01.2000 TO 01.01.2005” day.month.year

Pubblication Date 01.01.2000 TO 01.01.2005 will retrieve all patent and application documents published from 1-Jan-2000 to 01-01-2005.

❖ Parentheses to organize complex search queries:

Example: (mouse OR rat) AND (trap OR mousetrap)

PATENT SCOPE

<http://patentscope.wipo.int/search/en/search.jsf>

Patent database - PATENTSCOPE

STATISTICAL
ANALYSIS

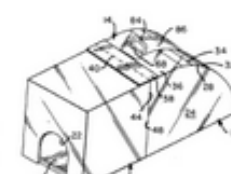
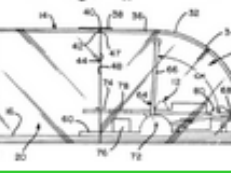
Results 1-10 of 384 for Criteria DP:([01.01.1990 TO 01.01.2012]) AND EN_AB:((mouse OR rat) AND (trap OR mousetrap)) Office(s):all Language:EN Stemming: true

prev 1 2 3 4 5 6 7 8 9 10 next Page: 1 / 39 Go >

Refine Search DP:([01.01.1990 TO 01.01.2012]) AND EN_AB:((mouse OR rat) AND (trap OR mousetrap)) Search RSS

Analysis

Sort by: Relevance View All +image List Length 10 Machine translation

| No. | Pub. No. | Pub. Date | App. No. | App. Date | Inventor | Applicant | Abstract | Figures |
|-----|-----------|------------|------------|----------------|----------------|--|---|---|
| 1. | 5172512 | 22.12.1992 | A01M 23/30 | 07747161 | Bodker Alan N. | Sterling Drug, Inc. | <p>A trap for catching mice and rats includes a standard mousetrap mounted within a two-part housing. The standard mousetrap includes a tab which projects through a slot in an arcuate upper wall of one portion of the housing, allowing one to cock the trap from the exterior of the housing. The first portion of the housing is pivoted to the second portion of the housing so that the housing can be conveniently opened to dispose of a mouse or rat caught in the trap. The housing shields the cocked trap so as to enhance the safety thereof while allowing one to empty the trap without running the risk of touching the mouse or rat caught therein.</p> |   |
| 2. | 101292646 | 29.10.2008 | A01M 23/38 | 200710021560.5 | Gao Linfeng | Nantong Fengshi Light Source Electronic Application Technology Institute | <p>The invention relates to an electric shock type mousetrap. Presently, rat poisons and ordinal mousetraps are available in the market, but a plurality of farmers buy rat poisons with no effectiveness medicine from the market due to profiteer thoughts existing in rat poison suppliers, thus causing the farmers who can do nothing to the mouse. The electric shock mousetrap of the invention kill mice by electric shock; when a mouse eats the bait, the electric shock mousetrap is triggered and high voltage is released to shock and kill the mouse, thus realizing the goal of killing mouse.</p> | |
| | | | | | | | al type mousetrap | |

Automatic
translation tab

Bibliographic data
with search terms
highlighted

PATENT SCOPE

Patent database - PATENTSCOPE

Home > IP Services > PATENTSCOPE

Automatic Summary of main:

Offices, Main IPC, Main Applicant,
Main Inventor and Publication Date

Results 1-10 of 384 for Criteria: DP:([01.01.1990 TO 01.01.2012]) AND EN_AB:((mouse OR rat) AND (trap OR mousetrap)) Office/s
Language: EN Stemming: true

prev 1 2 3 4 5 6 7 8 9 10 next Page: 1 / 39 Go >

Refine Search DP:([01.01.1990 TO 01.01.2012]) AND EN_AB:((mouse OR rat) AND (trap OR mousetrap))

Search

RSS



Analysis

Options ☒ Table ☐ Graph Options ☐ bar ☐ pie ☐ Line

Option for the
display of search
results:

TABLE or GRAPH
(Bar or Pie)

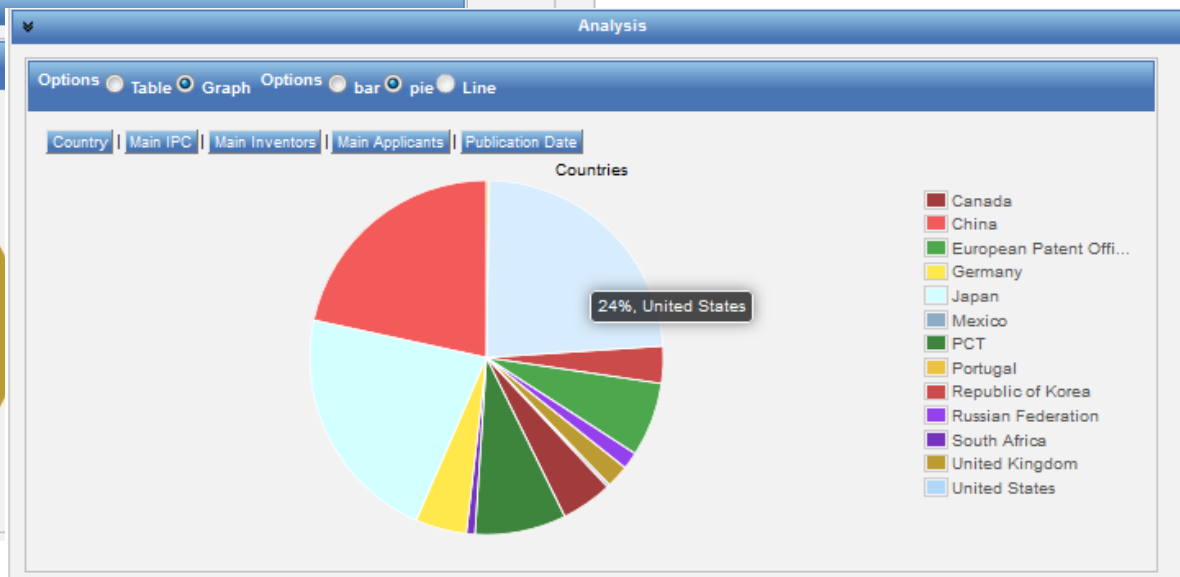
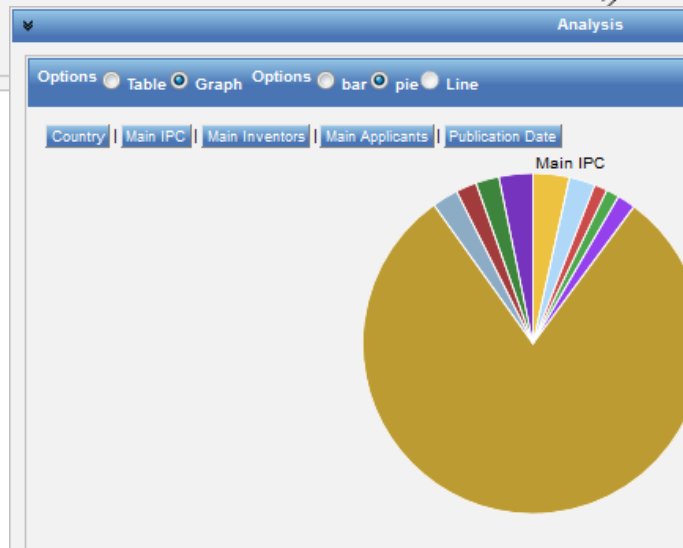
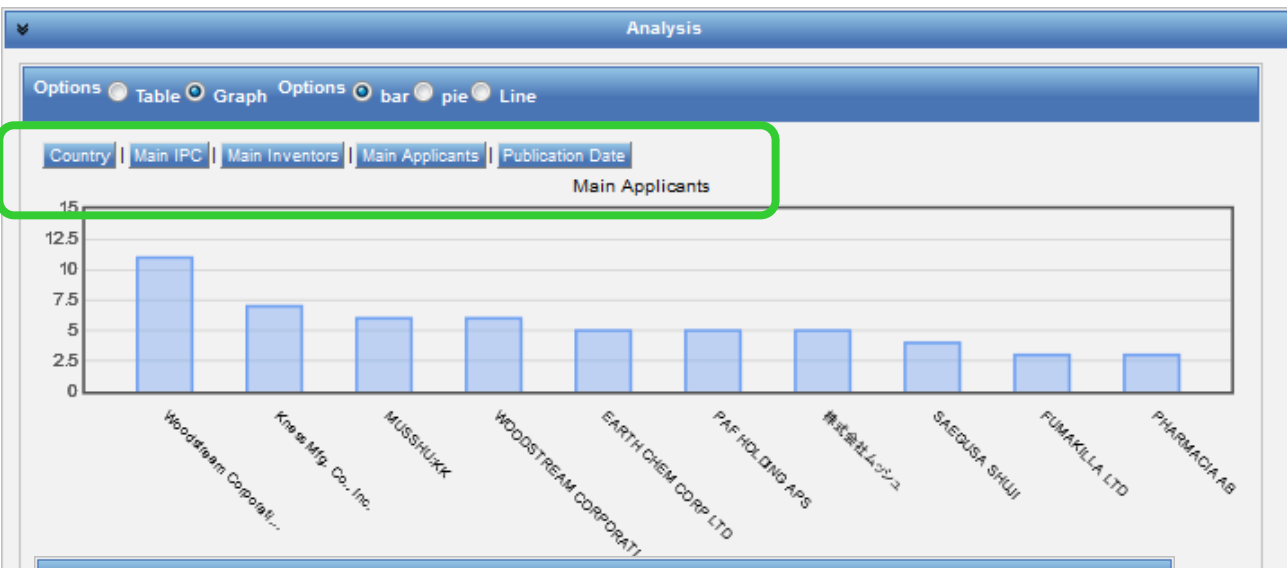
| Countries | | Main IPC | | Main Inventor | | Main Applicant | | Pub Date | |
|------------------------|----|----------|-----|------------------------|----|------------------------|----|----------|----|
| Name | No | Name | No | Name | No | Name | No | Date | No |
| United States | 91 | A01M | 324 | YAMAMOTO MASAO | 6 | Woodstream Corporation | 11 | 2006 | 22 |
| Japan | 84 | C12N | 14 | Anderson David L. | 5 | Kness Mfg. Co., Inc. | 7 | 2007 | 17 |
| China | 83 | C07K | 13 | Rich Christopher T. | 5 | MUSSHU:KK | 6 | 2008 | 28 |
| PCT | 32 | A01N | 10 | Gehret Michael J. | 4 | WOODSTREAM CORPORATION | 6 | 2009 | 33 |
| European Patent Office | 26 | G06F | 10 | Harman Larry L. | 4 | EARTH CHEM CORP LTD | 5 | 2010 | 26 |
| Canada | 18 | G01N | 9 | Knuppel, Harry E. | 4 | PAF HOLDING APS | 5 | 2011 | 43 |
| Germany | 18 | A61K | 8 | Lubic Marko | 4 | 株式会社ムッシュ | 5 | | |
| Republic of Korea | 13 | A61P | 7 | MOTODA ISAMU | 4 | SAEGUSA SHUJI | 4 | | |
| United Kingdom | 8 | A01K | 5 | Rodgers Brendyn Murray | 4 | FUMAKILLA LTD | 3 | | |
| Russian Federation | 6 | C12P | 5 | SAEGUSA SHUJI | 4 | PHARMACIA AB | 3 | | |
| South Africa | 3 | | | | | | | | |

PATENT SCOPE

Patent database - PATENTSCOPE

Option for the display of search results:

GRAPH - Bar or Pie

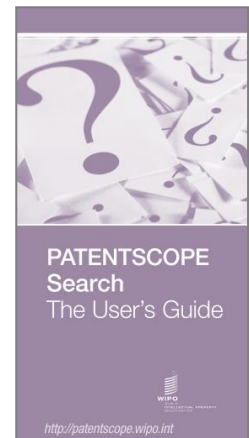
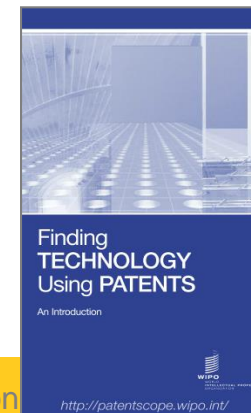
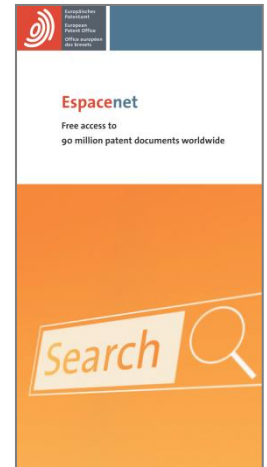


PATENT SCOPE

Main Databases for patent searches

Useful guides and references:

- ✓ **Espacenet – Getting started brochure** (8 pages, 2016 Edition);
 - **EPO**, <http://www.epo.org/searching/free/espacenet.html>
- ✓ **PATENTSCOPE Search- The User's Guide** (28 pages, 2015 Ed.);
 - **WIPO**, http://www.wipo.int/edocs/pubdocs/en/patents/434/wipo_pub_l434_08.pdf
- ✓ **Finding TECHNOLOGY using PATENTS** (12 pages)
 - **WIPO**, <http://www.wipo.int/patentscope/en/>



Main Databases for patent searches – Summary and Comparison Table

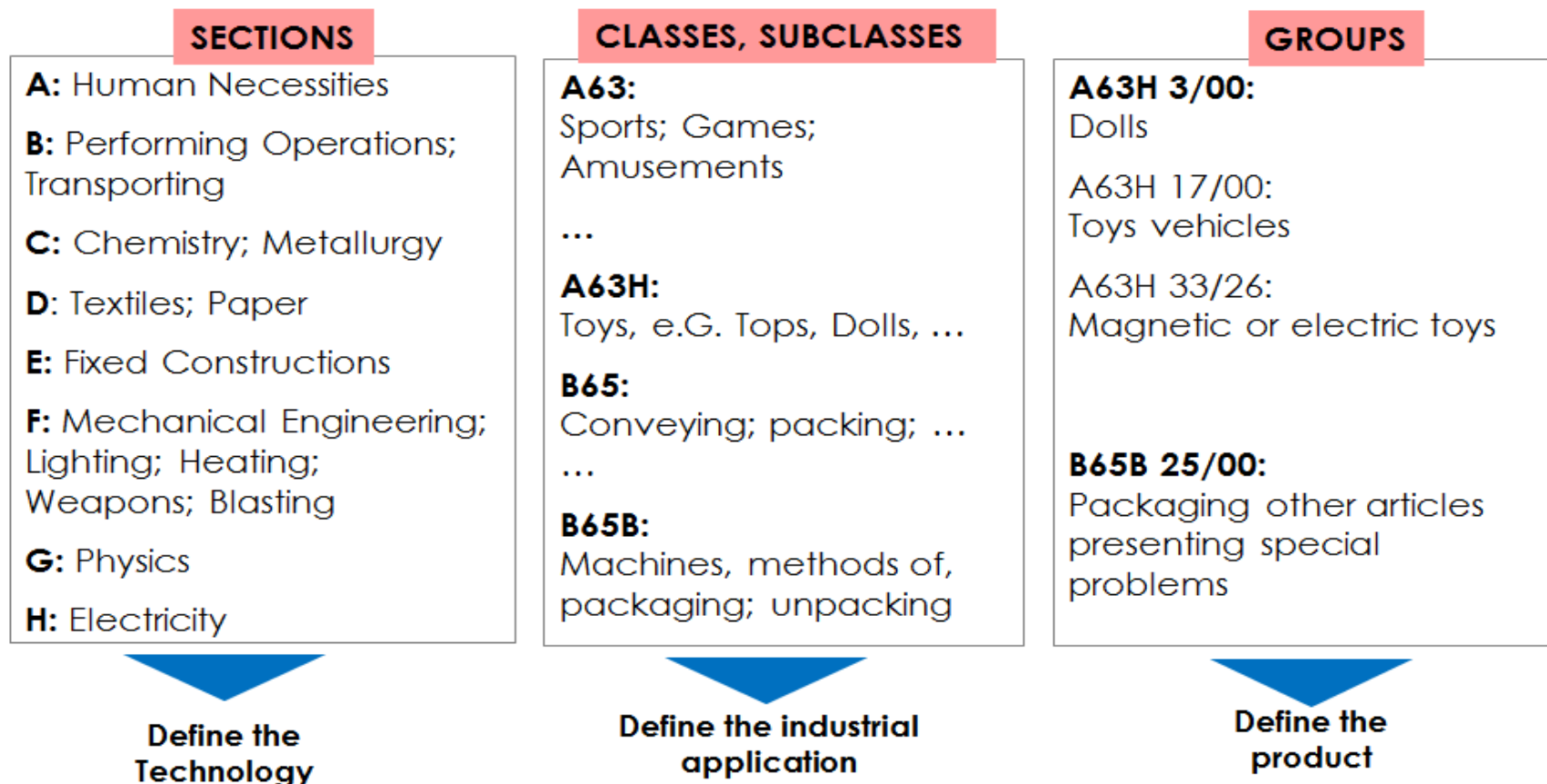
| FREE-OF-CHARGE DATABASE (Patent Office) | Database Extension | SEARCH OPTIONS: "Full Text" Search | SEARCH OPTIONS: Citations | LANGUAGE: Translation Tool | RESULTS: Legal Status and Events | RESULTS: Visualization of records as images | RESULTS: Analysis tools |
|---|--|--|---------------------------------|----------------------------------|--|---|-------------------------------|
| Espacenet (EPO) | National collections, EP, PCT | ✓ only for documents published in English, French and German language | ✓ | ✓ multiple languages | ✓ if available | ✗ | ✗ |
| JPlat-Pat (JPO) | JP National and patents and applications | ✗ | ✗ | ✓ only to English language | ✓ | ✗ | ✗ |
| Patentscope (WIPO) | National collections, EP, PCT | ✓ for English documents only | ✗ | ✓ multiple languages | ✓ if available | ✓ | ✓ |
| PatentInspiration (commercial DB) | National collections, EP, PCT | ✓ for English documents only | ✓ | ✗ | ✗ | ✓ | ✓ |
| USPTO (USPO) | US National patents and applications | ✓ | ✓ | ✗ | ✗ | ✗ | ✗ |

... different Search Services and Patent Databases with
different functionalities!!

Classification System

International Patent Classification-IPC: a hierarchical structure to classify patent documents and utility models according to technological sectors.

It is divided into 8 sections, classes and subclasses, groups and subgroups for a total of 70.000 sub-divisions



Classification System

International Patent Classification (IPC)

www.wipo.int/ipcpub/



IP SERVICES

This site is the IPC internet publication as from IPC version 2011.01.
See main changes associated to this version

WORLD INTELLECTUAL PROPERTY ORGANIZATION

IPC Home Page - Help

Version
2011.01

Current symbol
Go to

Language
☒ English
☐ French
☐ English/French

View mode
☐ path
☒ full
☐ hierarchic

☐ Standardized sequence
☒ Deleted entries
☐ Subclass indexes
☒ Guidance Headings
☒ Notes

Search
 Terms
 Cross-references
 Fuzzy (TACSY)

Scheme RCL Compilation Catchwords

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

☐ **IPC International Patent Classification**



- 8 sections
- International (EPO, WIPO, JP, US, > 100 countries)
- Maintained by WIPO
- 71.000 subdivisions (wide)
- yearly revision -> stable
- 37 million documents

Source:

Classification System

Advantages of patent classifications

- ❖ **Searches are independent of the wording of the applicants**
- ❖ **Information added by experts**
- ❖ Constantly being revised and updated
- ❖ Field is available in entry level portals (e.g. Espacenet)
- ❖ Useful field for statistical purposes
- ❖ Product and production processes can both be searched

Source:



Which strategies can be used to search patent information?

Some recurrent search criteria ...

- Search by keywords;
- Search by Date range
- Search by Applicant/Assignee Name or by Inventor Name
- Search by patent Classification;
- Combinations of previous ones
- Using Citations and reference information

Types of Patent Searches

Different types of objectives and Patent Searches:

- ❖ **State of the Art Search** (or PatentLandscape)
 - Review the development status of a technology
- ❖ **Patentability Search** (or Prior Art or Novelty Search)
 - Identify any prior art documents preventing to filing a patent.
- ❖ **Freedom to Operate Search** for target invention (or Right-to-Use or Infringement search)
 - Identify patent documents in force where one or more claims, prevent exploitation of the technology in a given country.
- ❖ **Validity (or Invalidity) search** of target Patent Application
- ❖ **Names searches** (Assignee or Inventor)
- ❖ **Watching and Surveillance search;**

... each search answers a specific question!