



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...



Fee-paying Patent Search Engines:

[www.delphion.com](http://www.delphion.com)

[www.orbit.com](http://www.orbit.com)

[www.derwent.com](http://www.derwent.com)

[www.dialog.com](http://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;

Europäische Patentamt  
 European Patent Office  
 Office européen des brevets

**Espacenet**  
Patent search

About Espacenet Other EPO online services

Search Result list My patents list (0) Query history Settings Help

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

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

← About Espacenet Other EPO online services ▾

Search Result list **★ My patents list (0)** Query history Settings Help

Refine search → Results

Smart search

Advanced search

Classification search

Quick help —

- [Can I subscribe to an RSS feed of the result list?](#)
- [What does the RSS reader do with the result list?](#)
- [Can I export my result list?](#)
- [What happens if I click on "Download covers"?](#)
- [Why is the number of results sometimes only approximate?](#)
- [Why is the list limited to 500 results?](#)
- [Can I deactivate the highlighting?](#)
- [Why is it that certain documents are sometimes not displayed in the result list?](#)
- [Can I sort the result list?](#)
- [What happens if I click on the star icon?](#)
- [What are XP documents?](#)
- [Can I save my queries?](#)

## Result list

Select all (0/20)  Compact

20 results found in the Worldwide database for:  
(mouse OR rat) AND (trap OR mousetrap) in the title AND US as the application number AND 2010:2016 as the publication date

Sort by  Sort order

<input type="checkbox"/>	Inventor:	Applicant:	CPC:	IPC:	Publication info:	Priority date:
<input type="checkbox"/> 1.	<b>Safety for mouse trap</b>					
★	CRIDER JACQUELYN R [US] CRIDER SR JACK B [US]		A01M23/245 A01M23/30		USD611559 (S1) 2010-03-09	2004-09-27
<input type="checkbox"/> 2.	<b>Mouse and Rodent Trap</b>					
★	MAHONY MICHAEL J [AU]		A01M23/30	A01M23/30	US2010223836 (A1) 2010-09-09 US7908790 (B2) 2011-03-22	2006-08-08
<input type="checkbox"/> 3.	<b>RAT TRAP</b>					

ESPACENET

<http://worldwide.espacenet.com>

**NAVIGATION MENU**

# 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](#) 20070807

Priority number(s):    [AU20060904287](#) 20060808 ; [WO2007AU01106](#) 20070807

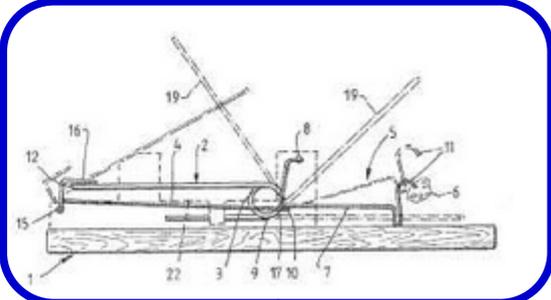
Also published as    [US7908790 \(B2\)](#)    [WO2008017110 \(A1\)](#)    [AU2007283447 \(A1\)](#)    [AU2007283447 \(B2\)](#)

Patent documents with the same priorities

**Abstract of US2010223836 (A1)**

Translate this text into    
    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.



Automatic translation tab

First page Drawing

**ESPACENET**

<http://worldwide.espacenet.com>

# Patent database - PATENTSCOPE

## 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

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

STATISTICAL ANALYSIS

Analysis

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

No.	Pub. No.	Pub. Date	App. No.	App. Date	Inventor	Applicant	Pub. No.	Pub. Date	Inventor	Applicant	
1.	5172512	22.12.1992	A01M 23/30	07747161	Sterling Drug, Inc.	Bodker Alan N.	U.S. Patent	Dec. 22, 1992	Sheet 1 of 3	5,172,512	
<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 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	Nantong Fengshi Light Source Electronic Application Technology Institute	Gao Linfeng	CN				
<p>The invention relates to an electric shock 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>											
							CN	02.09.1992			

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

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	2008	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
		G01N	9	Knuppel, Harry E.	4			2011	43
Canada	18	A81K	8	Lubic Marko	4	PAF HOLDING APS	5		
Germany	18	A81P	7	Konstantin		株式会社ムッシュ	5		
Republic of Korea	13	A01K	5	MOTODA ISAMU	4	SAEGUSA SHUJI	4		
United Kingdom	8	C12P	5	Rodgers Brendyn Murray	4	FUMAKILLA LTD	3		
Russian Federation	6			SAEGUSA SHUJI	4	PHARMACIA AB	3		
South Africa	3								

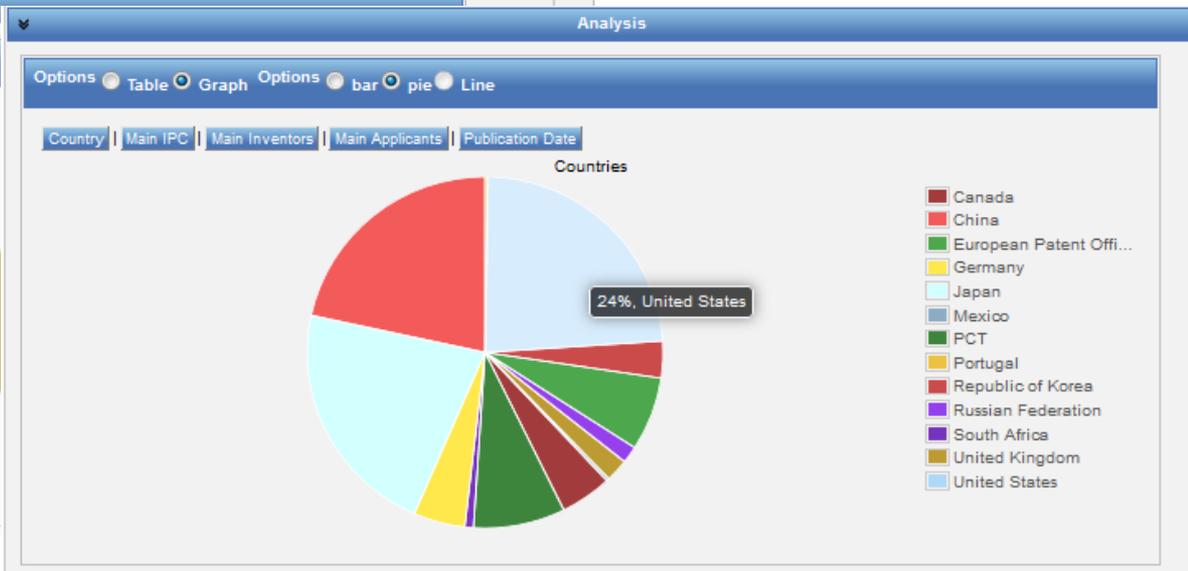
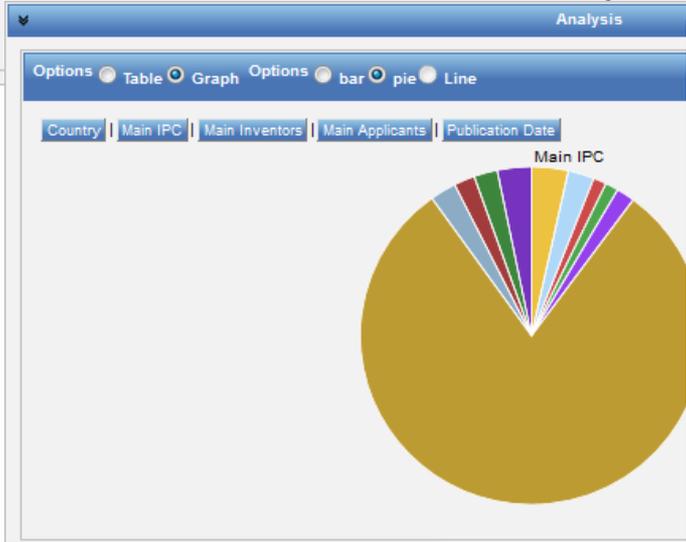
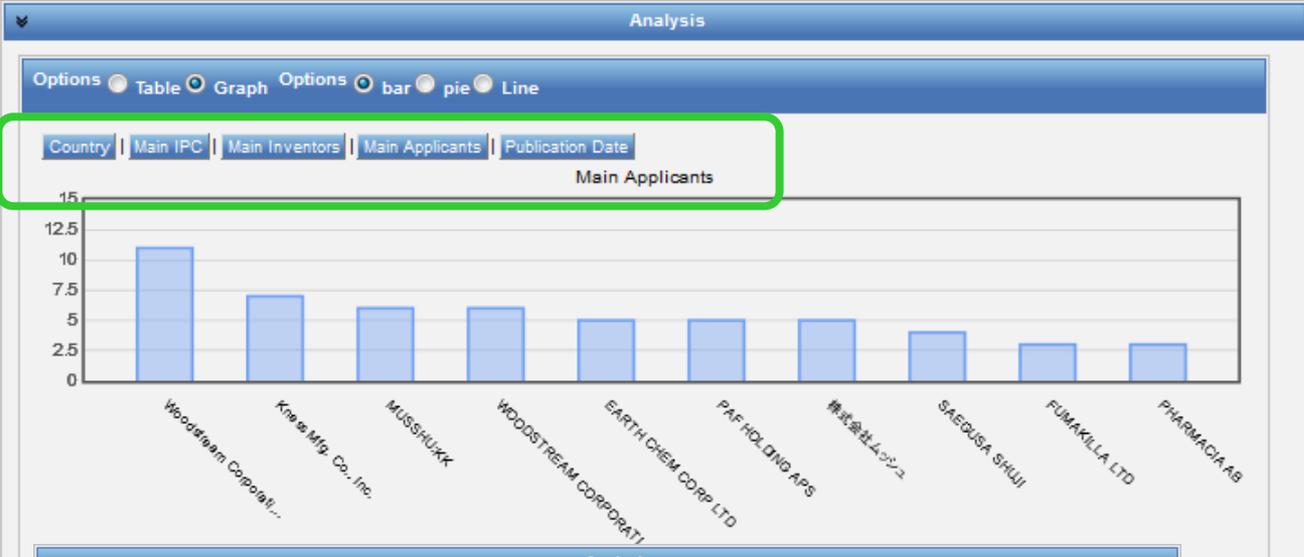
**Option for the display of search results:**

TABLE or GRAPH (Bar or Pie)

PATENT SCOPE

# Patent database - PATENTSCOPE

**Option for the display of search results:**  
GRAPH - Bar or Pie

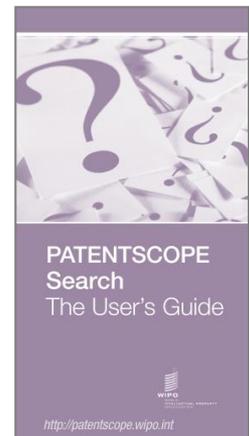
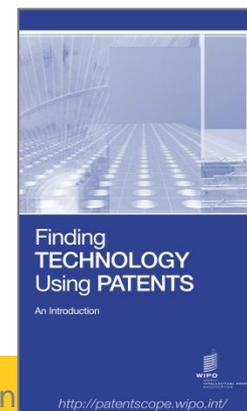


**PATENT SCOPE**

# 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](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

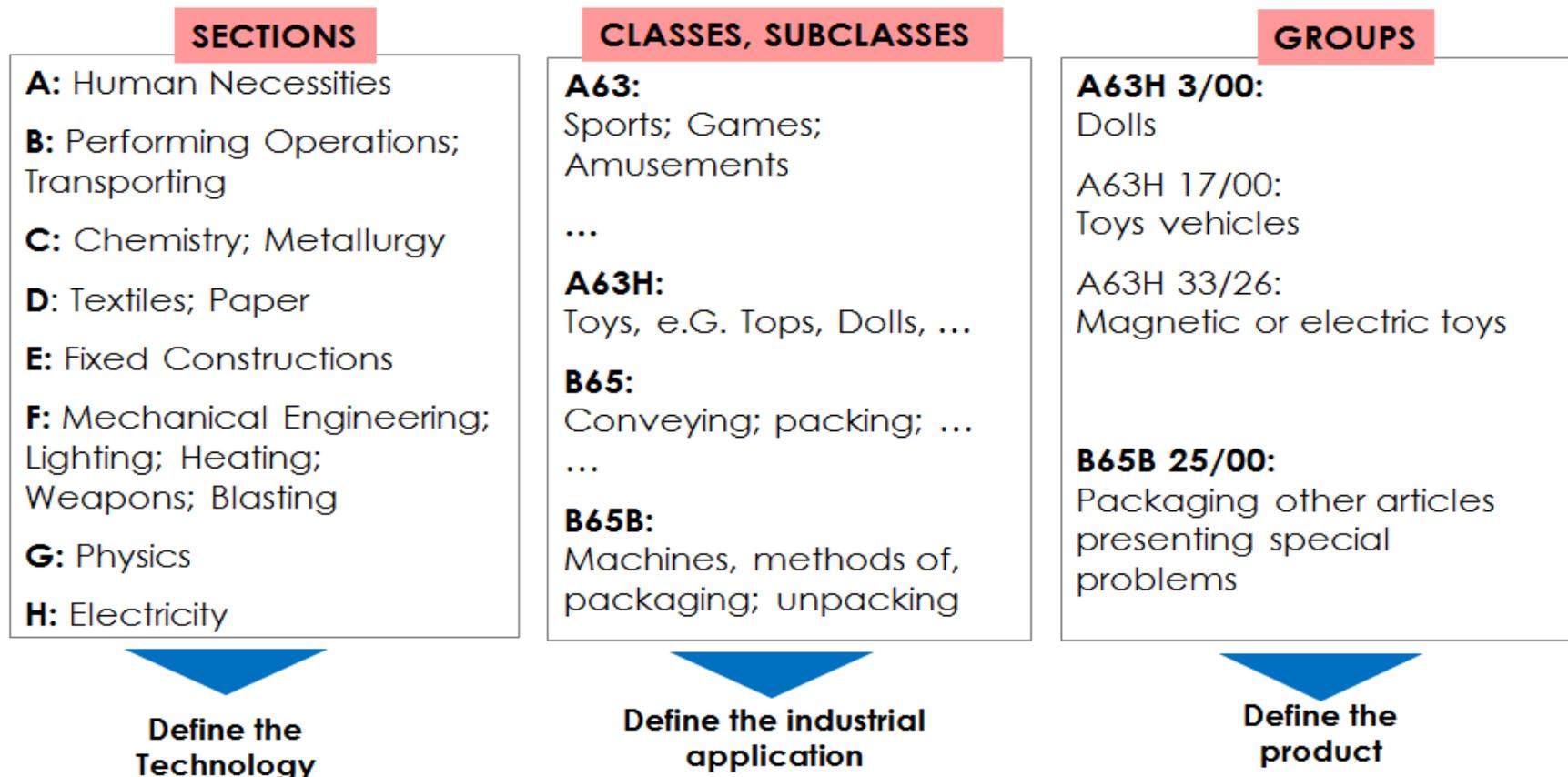
FREE-OF-CHARGE DATABASE (Patent Office)	Database Extension	SEARCH OPTIONS: "Full Text" Search	SEARCH OPTIONS: Citations	LANGUAGE: Translation Tool	RESULTS: Legal Status and Events	RESULTS: Visualization of records as images	RESULTS: Analysis tools
<b>Espacenet (EPO)</b>	National collections, EP, PCT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

This site is the IPC internet publication as from IPC version 2011.01.

See main changes associated to this version

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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
<input type="radio"/> A			<b>SECTION A — HUMAN NECESSITIES</b>
<input type="radio"/> B			<b>SECTION B — PERFORMING OPERATIONS; TRANSPORTING</b>
<input type="radio"/> C			<b>SECTION C — CHEMISTRY; METALLURGY</b>
<input type="radio"/> D			<b>SECTION D — TEXTILES; PAPER</b>
<input type="radio"/> E			<b>SECTION E — FIXED CONSTRUCTIONS</b>
<input type="radio"/> F			<b>SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING</b>
<input type="radio"/> G			<b>SECTION G — PHYSICS</b>
<input type="radio"/> H			<b>SECTION H — ELECTRICITY</b>

**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!