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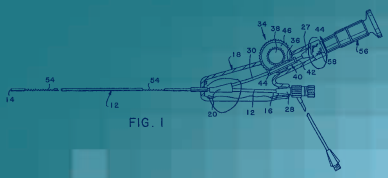

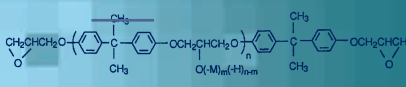

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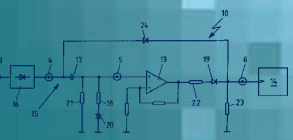


Searching using classifications

IPC ECLA

Revised:
December 2007

The most powerful feature in *esp@cenet*

If you use *esp@cenet* and are interested in finding all the patent publications in a particular technical area, you should try the Classification search feature. It is the most powerful search tool in *esp@cenet*, and also the least known.

Why use classification for patent documents?

The total number of patents is so large that a classification system is essential for searching. Classification breaks down patentable technology into manageable units.

The classification system for patents

The organisation responsible for the "International Patent Classification" system, or "IPC", is the World Intellectual Property Organization (WIPO), based in Geneva. The IPC is used by patent offices worldwide, combining letters and numbers in a certain way to categorise very precisely the technology described in a patent document. Today, every patent document published has at least one IPC symbol printed on the front page. Below you can see an example of an IPC classification symbol, A43B13/04, used to classify rubber soles for shoes.

Section	A	Human Necessities
Class	**A43**	**Footwear**
Subclass	**A43B**	**Parts of footwear**
Main group	**A43B13**	**Soles**
One-dot subgroup	**A43B13/02**	**. characterised by the material**
Two-dot subgroup	**A43B13/04**	**.. plastics, rubber or vulcanised fibre**

In *esp@cenet* you will find two classifications: the International Patent Classification (IPC) and the EPO's internal classification system ECLA ("European Classification"). ECLA is an extended version of the IPC and is based on the same philosophy.

Differences between the IPC and ECLA

The table below summarises the main differences between the IPC and ECLA.

IPC	ECLA
70 000 classification symbols 47 million documents	136 000 classification symbols 30 million documents
Updated periodically	Updated permanently
Possible to search at "core" or "advanced" level	Only one level, equivalent to "advanced" in the IPC.
Classified by the publishing office	Classified by the EPO
Classified on publication of the patent application	Classified about six to eight months after publication of the patent application

Experienced patent searchers get to know the IPC and ECLA for their technical field very well and are able to judge whether the IPC or ECLA will yield the best results. If you are new to classification searches or to the technical field you are searching, we recommend you perform your search in both ECLA and the IPC to be sure you don't miss any important documents.

Going beyond this brochure

Interactive learning modules

Try the **interactive learning modules** on classification that you can find in the ***esp@cenet* assistant** by clicking on the link on the lefthand side of the *esp@cenet* screen.

Training courses

Take a look at **http://patentinfo.european-patent-office.org/learning/** for information on the latest **training courses for *esp@cenet* users**. You can take part in one of our conventional classroom seminars or join our **internet-based "virtual classroom" courses**.

esp@cenet help

Users help users at the ***esp@cenet* forum** at **www.espacenet.com**, or you can write to the ***esp@cenet* helpdesk** at **espacenet@epo.org.**

Information on classifications

The organisation responsible for the IPC is WIPO – their website has a lot of information on classifications at: **http://www.wipo.int/classifications/en/**

IPC reform

The IPC has recently been the subject of a major reform – see the EPO microsite on the **IPC reform** for more information: **www.epo.org/patents/patent-information/ipc-reform.html**

Languages

Finally, the text of the IPC is available in many languages – consult your national patent office to find out if your language is one of them.

Important!

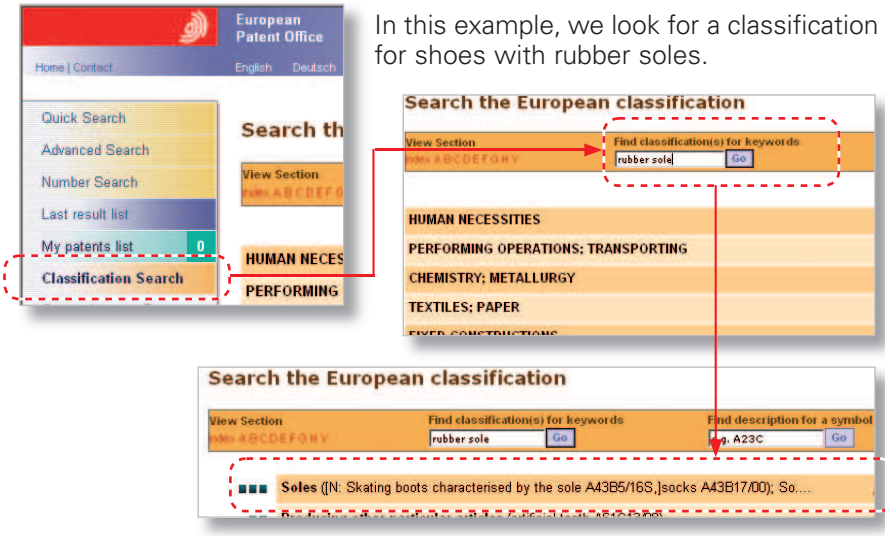
For accurate searches always seek professional advice. *esp@cenet* can give you a useful overview of the state of the art, but if you need an in-depth search, it's advisable to consult a patent information expert.

Step **1**

Identify possible relevant classes

The first thing to do is to identify classification symbols that appear in your technical area and might therefore be interesting for your search. To do this, you can:

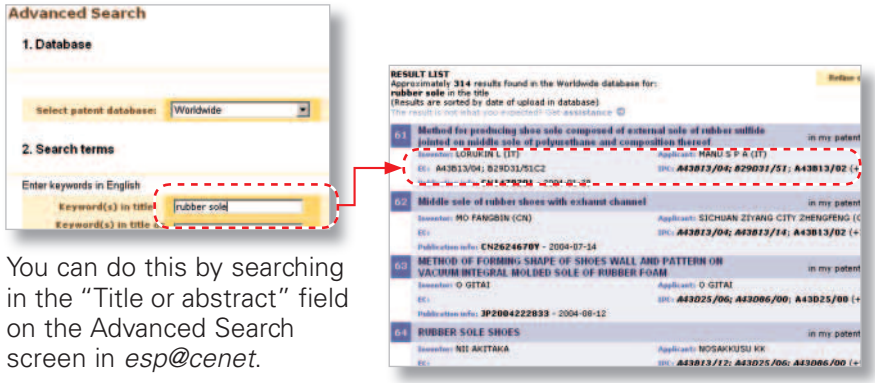
Enter a keyword in the "Classification Search" feature in *esp@cenet*



In this example, we look for a classification for shoes with rubber soles.

… or

search with keywords and look at the results …



You can do this by searching in the "Title or abstract" field on the Advanced Search screen in *esp@cenet*.

… or

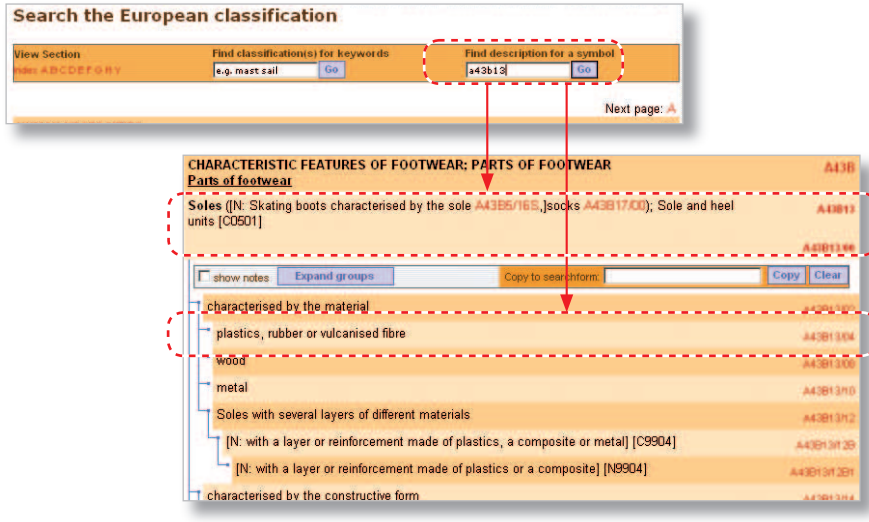
simply look at a known document

Step **2**

Choose classes for your search

Use Classification Search to select ECLA classes ...

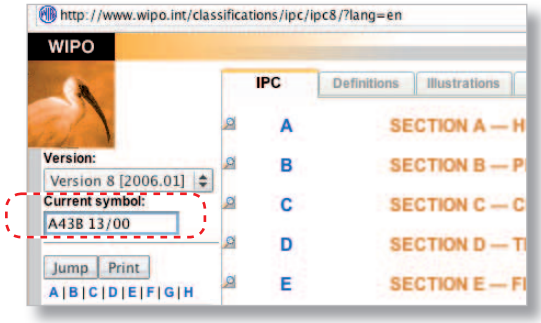
Enter a classification symbol of interest to read what it stands for.



You can browse through the classification symbols that are near to the one you entered for the search. If any of the classification symbols shown on the screen seem to describe what you're looking for, you can select them by clicking the box on the right of the symbol's description. You can select up to four classification symbols. When you click on the "copy" button the system will automatically enter them for you in the ECLA field of the Advanced search screen.

... and

use the WIPO classification site to choose IPC classes



Check the classification definition in the IPC to see if it differs from ECLA.

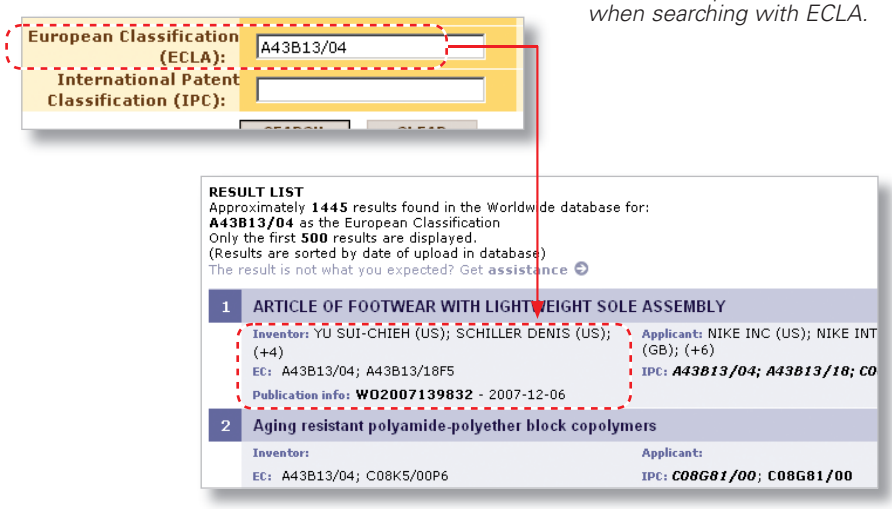
Step **3**

Perform an initial search and look at the results

in ECLA …

In ECLA, you retrieve documents where the EPO has given the classification symbols you searched.

Note: The EPO needs up to eight months to classify new documents, so you may miss recent publications when searching with ECLA.



If your classification search results in too many hits for you to look at each patent document individually, you may want to look for ways of refining your search to filter out some of the less relevant hits. There are several ways of doing this, including:

- combining your classification symbol(s) with keywords that do not appear in the definition of the classification
- combining a classfication symbol with other search terms, such as inventor name, applicant name, publication date, etc
- combining two or more classification symbols using the boolean "AND" operator
- searching at a different hierarchical level in the classification systems.

These are explained in more detail in Step 4 of this guide.

… and

in the IPC

In the IPC, you will often get a higher number of results because there are fewer sub-classes than in ECLA and more documents are classified using the IPC than using ECLA.

Note: IPC classes are given by the patent office that publishes the patent application, and can vary from country to country.

int/classifications/ipc/ipc8/?lang=en

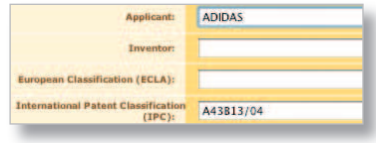
Step **4**

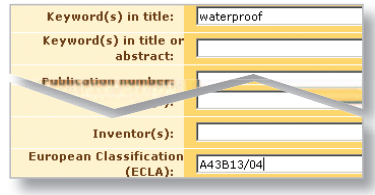
Refine your search

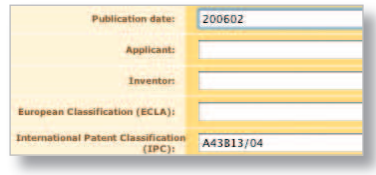
Combine with other search terms

For example

- combine your classification search with an applicant's name to find out what your competitors are doing
  or
- combine with keywords from another technical area (combining with words that describe the classification symbol is not recommended because this introduces unnecessary duplication of ideas in your search)
  or
- combine with dates (eg "200602" for February 2006) to look for new patent publications. Only use the IPC for this, not ECLA, owing to classification delays.







Use other classification symbols

You can repeat your search using other, related classification symbols, or you can combine your initial search with a second technical concept using a second (or more) classification symbol(s).

In our example we searched for rubber shoe soles. If we combine this with the ECLA symbols for anti-skid shoe soles (A43B13/22), we can retrieve documents that describe rubber, anti-skid soles.

Search at various hierarchical levels

To be sure of having done a thorough search, you must search all the classification symbols that could possibly describe the invention you are looking for. You add additional classification symbols by using the "OR" function, or by repeating your search with a new symbol. One way of searching a broad range of classes is to search at "Main class" or "Sub-group" level. In our example you could search:
"A43B" for anything to do with shoes,
or
"A43B13" for anything to do with shoe soles.

You can also search in the IPC using "core level".

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European Patent Office

Vienna:
Rennweg 12
1030 Vienna
AUSTRIA
Tel.: +43 1 52126 0
Fax: +43 1 52126 3591

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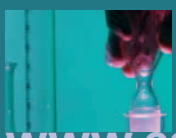

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