Espacenet Resource Book

User documentation and online help
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Concepts

A concept topic provides background information about the overall goal of the application and provides technical and legal information. Concepts cover all kinds of knowledge beyond the scope of instructions for using the application.

Concept topics are especially important for users who are new to patent research in general. The topic title should clearly reflect that this information is not necessary for experienced users, so these can skip the concepts and concentrate on tasks and references.
Espacenet – patent search worldwide

Espacenet is a free internet service provided by the European Patent Office (EPO) and the European Commission, as well as a number of national and regional patent offices. Espacenet offers access to patent documents from all over the world – most of them patent applications rather than granted patents. Patent applications normally represent the first publication of a new idea, appearing ahead of journal articles and before new products reach the market.

The EPO endeavours to offer the general public the best possible access to its data resources. Espacenet offers access to the same patent database as is used by EPO examiners. Some of the information contained in Espacenet reaches as far back as 1836.

In Espacenet you will find:

- more than 100 million patent documents from over 90 countries
- links to the European Patent Register for European patent applications and Euro-PCT documents
- links to selected national patent registers for national patent documents
- links to the Global Dossier for patent documents from the patent offices of China, Japan, Korea, USA, Canada and the World Intellectual Property Organization (WIPO)
- legal status information, helping you find out whether protection rights exist and in which countries a patent is in force
- patent family information, telling you if similar patent applications have been filed in other countries
- references to other kinds of technical literature (non-patent literature)
- citations, listing other documents that are cited by the patent document you are currently viewing or that cite the same patent document
Benefits of searching in Espacenet

Espacenet is directed towards anyone with an interest in technology, innovation and intellectual property.

You can use Espacenet to:

- get an overview of the state of the art
- get information on the latest technological developments
- find solutions to your technical problems
- search for inventions you are already aware of
- discover who invented what or who has filed a patent application
- find out what technological developments your competitors are working on

Espacenet is not intended for exhaustive patent research or establishing the state of the art in its entirety. If reliable and extensive research is required as the basis for major investment, the professional help of patent search experts should always be sought.
Patents and inventions

A patent is a legal title which protects a technical invention for a limited period. It gives the owner the right to prevent others from exploiting the invention in the countries for which it has been granted. All patents are published, so everyone can benefit from the information they contain. Patent applicants must disclose in detail how their invention functions. There are not many types of literature that describe technologies as precisely as patent documents do.

An invention can, for example, be a product, a process or an apparatus. To be patentable, it must be new, industrially applicable and involve an inventive step.
**Patent documents**

Patent documents are documents published by patent offices that contain information about inventions for which a patent application has been filed or granted, or for which a utility model has been registered.

Each year, more than a million patent documents, based on approximately half as many inventions, are published worldwide. Only a small number of inventions are described in sources other than patent documents. This makes the information in these documents invaluable for an understanding of the status of both technology and innovation processes.

Patent documents mainly consist of patent applications and granted patents, along with the search reports, amendments to these documents, and translations. The type of publication is indicated by a code affixed to the document number.

Patent documents consist of:

- a first page comprising basic information such as the title of the invention and the name of the inventor
- a detailed description of the invention indicating how it is constructed, how it is used and what benefits it brings compared with what already exists
- claims containing a clear and concise definition of what the patent legally protects
- drawings
Non-patent literature

In addition to patent literature, the EPO's search documentation includes any other printed or non-printed material that may be technically relevant for the patent grant procedure. This documentation is called non-patent literature.

Non-patent literature can be an important source of information on the state of the art. It primarily consists of articles from scientific magazines, conference reports, books, internet pages, etc. The latest developments emerging from scientific publications and conferences are usually found in these sources first. This is especially true for research results from universities or scientists, who often tend to publish their results in scientific publications or within the context of conferences and do not necessarily protect their inventions with patents.
Patent classification

Patent classification is a system of sorting inventions and their documents into technical fields covering all areas of technology.

Every patent document, regardless of whether it is an application or a granted patent, is given a classification symbol by the examiner indicating its allocation to a specific area of technology.

Benefits of patent classification

Patent classification systems make it easier to file and retrieve patent documents.

When performing searches, patent examiners, inventors and companies need to obtain results that are as accurate as possible. State-of-the-art searches would be virtually impossible without classification, because searching with keywords can often produce inaccurate and incomplete results due to the language in which patent documents are written and the terms used.

Classification systems

Patent documents are classified according to different classification systems depending on the patent granting authority concerned.

The most important classification system is the *International Patent Classification system (IPC)*. Introduced in 1968, the IPC is used by all patent offices worldwide, some of which also use a national classification system.

The *Cooperative Patent Classification system (CPC)* is an extension of the IPC and is used by the European Patent Office (EPO), the United States Patent and Trademark Office (USPTO) and a few other national offices. The CPC entered into force on 1 January 2013 and replaces the European Patent Classification (ECLA) and the US Patent Classification (USPC).

CPC symbols are allocated to patent applications in order to make the classification more exact and therefore simpler to use. The CPC subgroups are added to the IPC symbol. While the IPC has 70 000 entries, the CPC has more than 250 000, making it much more precise.
Classification scheme updates

The IPC is updated every year on 1 January. After each update, all patent documents – except for historical documents – are reclassified. A patent document in Espacenet may therefore contain legacy classification symbols, which are enclosed in parentheses.

Like the IPC, the CPC is also continually brought into line with advances in technology and updated as required. When the CPC changes, all patent documents are also reclassified in accordance with the new system. This means that there is only ever one single version of the CPC: the one currently in effect.

Whenever there are changes to the CPC classification scheme, you will be informed of the updates on the EPO website.
The International Patent Classification (IPC) system

Introduced in 1968, the IPC is used by all patent offices worldwide, some of which also use a national classification system. The IPC has a hierarchical structure and is subdivided into sections, classes, subclasses, groups and subgroups. One of the most precise classification systems available, the IPC currently divides technology into around 70 000 sub-areas.

Areas of technology

In the IPC, technology is divided into eight main sections:
A Human Necessities
B Performing Operations; Transporting
C Chemistry; Metallurgy
D Textiles; Paper
E Fixed Constructions
F Mechanical Engineering; Lighting; Heating; Weapons; Blasting Engines or Pumps
G Physics
H Electricity

IPC divisions

The IPC has a systematic and hierarchical structure. Classification becomes more detailed with every further (sub)division, as you can see in this example:

<table>
<thead>
<tr>
<th>Level</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>A</td>
<td>Human necessities</td>
</tr>
<tr>
<td>Class</td>
<td>A21</td>
<td>Baking; edible doughs</td>
</tr>
<tr>
<td>Subclass</td>
<td>A21C</td>
<td>Machines or equipment for processing doughs</td>
</tr>
<tr>
<td>Group</td>
<td>A21C1</td>
<td>Mixing or kneading machine for the preparation of dough</td>
</tr>
<tr>
<td>Subgroup</td>
<td>A21C1/06</td>
<td>With horizontally-mounted mixing or kneading tools</td>
</tr>
</tbody>
</table>

Visit the WIPO website to find more information about the IPC:

http://www.wipo.int/classifications/ipc/en/

For the text of the IPC and related documentation, visit the IPC page on the WIPO website:
The Cooperative Patent Classification (CPC) system

The Cooperative Patent Classification (CPC) system, in force from 1 January 2013, is a bilateral system which has been jointly developed by the EPO and the USPTO. The CPC is subject to ongoing review by both offices, and documents are reclassified accordingly. CPC is designed for efficient searching – an important aspect for users of patent information.

The CPC is the EPO's main classification scheme. When the CPC superseded the ECLA in January 2013, the ECLA and ICO schemes were flattened into one scheme. All the breakdown and orthogonal codes were migrated to the 2000 series, by adding 2000 to the original main group digits.

The CPC is based on the IPC and consists of:

- all IPC symbols
- a main trunk of CPC symbols
- a 2000 series of indexing codes for additional information

The CPC includes the same sections as the IPC plus a Y section for tagging emerging technologies or technologies spanning several sections of the CPC. When a new patent document is to be allocated a CPC symbol, it is sent to the appropriate examiner. Regardless of whether the document already has an IPC symbol and where it comes from, the examiner assigns it to one or more CPC classes. The CPC symbol is an extension to the IPC symbol which further classifies the patent document into a specialised category. It is estimated that 90% of the documents requiring a CPC classification will receive one within eight months after publication.

For more information, including concordance tables, CPC definitions and news, visit the CPC website, which is jointly hosted by the EPO and the USPTO:

http://www.cooperativepatentclassification.org

http://www.cooperativepatentclassification.org/cpcSchemeAndDefinitions.html
Patent families

Patents are industrial property rights that provide protection in a certain country or countries. Inventions are frequently the subject of patent applications in several different national or regional patent offices or with the World Intellectual Property Organization (WIPO).

Family members and priorities

Where there are several applications or publications for an individual invention (in other countries) claiming the same priority or priorities, we talk about a "patent family". All of these "family members" have priority numbers with associated priority dates in common, in other words, they are related to one another by one or more priority applications.

Applications filed in other countries or languages

Patent applications are often filed in more than one country. You can find out if further applications have been filed in other countries by viewing the patent family of the relevant patent application.

This will tell you the countries in which patent applications were filed and published, which in turn will enable you to monitor the international market in your line of business, keep an eye on the worldwide situation and be aware of innovations and changes.

Patent families can also help to find another language version of a patent document.

Patent families in the European Patent Register

There are various definitions of what constitutes a patent family. However, the differences only become obvious when the structure of a patent application is complex.

Complex structures occur when patent applications are filed in several different countries. In applications of this kind, various earlier applications are often cited as priorities. Moreover, different claims may be accepted or rejected by the various patent offices during the granting process. This then results in patents with different scopes of protection.

In the European Patent Register a patent family is defined as comprising all the documents sharing – directly or indirectly (e.g. via a third document) – at least one priority. This includes all the patent documents resulting from a patent application submitted to a patent office as a first filing and from the same patent application filed within the priority year with a patent office in any other country.

Patent families in Espacenet

In Espacenet, this broad definition of a patent family would be called an INPADOC family. At the same time, a patent family defined as comprising all documents having exactly the same priority or combination of priorities is called a "simple family".
Equivalents are members of a (simple) patent family, which means that they have exactly the same priorities.

In Espacenet, on the other hand, a patent family is defined as comprising all the documents having exactly the same priority or combination of priorities (simple family). However, deeper analysis of certain patent documents might lead to specific priorities being declared "non-active". In other words, these specific priorities are ignored in the building of simple families.
The INPADOC database

The EPO's INPADOC database is a collection of bibliographical data from patent documents, i.e. patent applications and granted patents, and the legal status of these documents. The INPADOC database may also include some procedural information and statements of payments of renewal fees.

Like many other databases, the European Patent Register has to rely on the correctness of the data supplied by third parties – in this case the co-operating patent offices – and on the extent to which that data is up to date. In particular, delays in the delivery of bibliographic or legal status data can vary significantly depending on the country concerned and the time period covered.

To be absolutely sure about the actual status of a patent, we recommend that you contact the relevant patent office or authority direct.
The worldwide patent database

The worldwide database offers you the possibility to search for published patent applications from over 90 patent-granting authorities. However, the EPO relies on the data contributed by the patent-granting authorities and therefore cannot guarantee that the data in Espacenet is complete.

PCT minimum documentation

The worldwide database is based on the PCT minimum documentation, which is defined by WIPO as the minimum requirement for patent collections that are used to search for prior-art documents for the purpose of assessing novelty and inventiveness. More information about the PCT minimum documentation can be found on the WIPO website:

http://www.wipo.int/pct/en/texts/rules/r34.htm

The EPO has expanded the coverage of its database far beyond the PCT minimum documentation to include data from other countries and earlier time periods. Moreover, additional information, such as CPC symbols and references to cited documents, is added by EPO examiners in the course of their work.

Availability of the PCT minimum documentation in the worldwide database

<table>
<thead>
<tr>
<th>Country</th>
<th>Facsimiles from</th>
<th>Abstracts from</th>
<th>Cooperative Patent Classification (CPC)</th>
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<tbody>
<tr>
<td>CH</td>
<td>1888, from CH1 onwards</td>
<td>1970</td>
<td>1888</td>
</tr>
<tr>
<td>DE</td>
<td>1877, from DE1 onwards</td>
<td>1970</td>
<td>1877, from DE1 onwards</td>
</tr>
<tr>
<td>FR</td>
<td>1900</td>
<td>1970</td>
<td>1902</td>
</tr>
<tr>
<td>GB</td>
<td>1859</td>
<td>1893</td>
<td>1859</td>
</tr>
<tr>
<td>US</td>
<td>1836, from US1 onwards</td>
<td>1970</td>
<td>1836, from US1 onwards</td>
</tr>
</tbody>
</table>

Latest updates to the database

You will find up-to-date information on the EPO website.

Latest bibliographic coverage:
Updates to the database

The EPO’s databases are updated daily. Data is added to the database as soon as possible after it is received from the national patent-granting authorities.

For more information on the data content of the database, please see the EPO website under *Information on EPO data*:

http://www.epo.org/searching-for-patents/helpful-resources/data.html

Availability of searchable data in the database

Documents enter the database with the following searchable fields: application number, priority number, publication number, publication date, inventor, applicant and International Patent Classification (IPC).

The Cooperative Patent Classification (CPC) assigned by EPO examiners is usually available a few months after the publication date. This means that you should not search with CPC symbols if you are targeting recently published documents.

For abstracts which are not in English, the English translations are normally loaded approximately one month after the publication date, depending on availability and delivery from the national offices and patent-granting authorities.
Deduplication

There is one important thing Espacenet does while you are paging through the search results: It constantly tries to improve the search result by removing “duplicates” of the same entries from the result list and grouping these equivalent items together – i.e. it will aggregate results that belong to the same patent family. That way, you will find the results for a specific patent family in one place instead of scattered across the whole result list.

This process of improving the search result by removing duplicates and grouping equivalent items is called deduplication. Deduplication guarantees that if you have singled out a specific result that best suits your needs, you need not bother looking for equivalent entries in the remaining result list. Deduplication thus also ensures that distinct results are, in fact, really different.

Espacenet can however only apply deduplication while serving you with the details of a result as you iterate over the pages of the result list, modifying the result list while you are paging through it. At the same time, this means that the total count of results is merely an estimate, which is indicated by the word Approximately before the given number. It is only when you reach the end of the result list that the exact number of results – each representing a patent family – is known. The word Approximately will disappear and, for a given result list, the number of hits will no longer change.
The IP language – how to say it in Espacenet

Even if it sounds trivial, before you start searching you should consider how to formulate your keywords appropriately. When choosing keywords, you should pay attention to every minor detail, including the way you spell them. Especially in English, the same thing can be described with various different words, and various different spellings are permitted.

Here are some basic rules for how to find the right keywords.

Avoid frequently used words

The word *device*, for example, can refer to a *unit*, *apparatus*, *component*, *instrument*, etc., which means that you will get a vast number of results if you use it in your search.

Think about results

Always first think thoroughly about what you want to search for, e.g. *headphone for a mobile telephone* or *CD player*.

Use synonyms

Instead of just searching for *headphone*, use more concrete terms such as *ear*, *ear plug* and *wireless*.

You should always consider the fact that the applicant or translator may have used other expressions or spellings. A *headphone* could also be called *earphone*, *headset* or even *listening device*, or may also be found with *head-phone*, *head phone*, *ear-phone*, *ear phone*, *head-set* and *head set*. Plural forms, such as *ear plugs*, should also be taken into consideration.

Add more terms to your query

Using the appropriate operator is important when you combine multiple terms into a search query.

ó **AND** is used to narrow down search results.

The more terms related to the desired patent you enter, the more accurate the result of the search will be. However, you should take care not to enter too many search terms. This could narrow down your list of results too much and spoil your chances of finding other information which may not contain one of the keywords.

ó **OR** is used to extend search results.

If it is unclear how a term is spelt, you should carry out a search for both variations: as one word and as separate words.
Example

Did you know that ...

- a *disposable dental device* can be a *toothpick*?
- a *receptacle for cooling liquid foods* can be a *thermos flask*?

Would you have thought of that? If you enter *toothpick* or *thermos flask* as search terms, Espacenet will of course retrieve a number of results for these queries. However, with these terms you exclude documents in which the invention is described with different words.

For the same reason you would not search for *flashlight* and *torch* at the same time, since both words describe the same thing. It is highly unlikely that the word *flashlight* will come up in a title that also contains the word *torch*, so you should avoid combining words with identical or very similar meaning.

Limitations

Keywords with more than one meaning are not evaluated by the search engine. This means that the word *coat*, for example, could refer to both an item of clothing and a layer of paint.

Synonyms and specialist terms are not taken into account. It may be necessary to carry out several searches using the various different terms.
The European Patent Register

The European Patent Register is the place where the European Patent Office stores all the publicly accessible information about European patents and patent applications in the various stages of the grant procedure. You can access all this data in the Register on the Internet at any time.

You can view the procedural data for all European, Euro-PCT and PCT applications as soon as they are published. The Register allows you to find all the publicly accessible documents from the files maintained by the European Patent Office on these patent applications – including oppositions, patent attorney/EPO correspondence and more.

The Register provides for public file inspection and allows you to access the data in Espacenet. You can also follow the links to the patent registers of many of the member states of the European Patent Organisation to see the status of granted European patents after they have entered the national phase.

The European Patent Register is a publicly available service and free of charge. You can also inspect paper copies of the files upon request. However, this will take at least four weeks and you will have to pay an administrative fee.
The World Intellectual Property Organization (WIPO)

The World Intellectual Property Organization (WIPO) is one of the 16 specialised agencies of the United Nations system of international organisations. Its headquarters are in Geneva, Switzerland.

WIPO is responsible for:

- the promotion of the protection of intellectual property throughout the world through co-operation among states.
- the administration of various multilateral treaties dealing with the legal and administrative aspects of intellectual property.
- the administration of the Patent Cooperation Treaty (PCT) and PCT patent applications.

For more information, visit the WIPO website:

Patent information centres (PATLIB)

PATLIB (PATent LIBrary) centres provide users with access to patent information and related services in the language of the country where the centre is located.

In PATLIB centres, qualified and experienced staff can offer practical assistance on a variety of intellectual property rights. Familiar with the needs and requirements of local trade, commerce and industry, PATLIB centres provide a valuable service to small and medium-sized enterprises, private inventors and academics in particular.

For more information and a list of PATLIB centres visit the EPO website:

http://www.epo.org/searching/patlib/directory.html
Tasks

A task topic provides step-by-step instructions to the user and focuses on helping to achieve a specific goal. The task’s context and preconditions (if any) are explained briefly. Examples are used to explain the possible options for performing the task. The task ends with a description of the result to be expected.

A task topic is clearly user-oriented. The task’s title should reflect a common goal which a user might have in mind when moving around in the application.
Accessing Espacenet

Searching in Espacenet is free of charge and does not require registration. Espacenet can be accessed from all over the world and is available in many languages.

The Espacenet homepage is at https://worldwide.espacenet.com. You can either type this address or use the shortcut link www.epo.org/espacenet.

- Go to www.epo.org/espacenet ..

This will redirect you to the **Smart search** screen, from where you can start searching in Espacenet.

The user interface of the Espacenet home page offers the following interactive areas:

1. Link to the EPO home page
2. Language selection, email to helpdesk, links to Espacenet at the national patent offices
3. Main navigation
4. Search navigation
5. Maintenance news, Espacenet news (e.g. CPC releases), latest updates (list of application numbers) and related links (various information pages)
6. Smart search area
7. Editorial text and other news from the EPO

The Espacenet home page displays the Smart search screen
Setting the language for Espacenet

The user interface of Espacenet at the EPO is available in the three official EPO languages: English, French and German. By default, Espacenet is displayed in English.

/ To change the interface language, click your preferred language in the top right corner of the Espacenet screen.

Espacenet in other languages

Most EPC member states and a number of international and regional patent offices have set up Espacenet in their national language as a subdomain of Espacenet at the EPO or as an extra service within their patent office’s website.

/ To use Espacenet in the official language of another country, move your mouse cursor over the Change country link in the top right corner of the Espacenet screen.

\ The country selection menu opens.

/ Select the appropriate country.
You then see the Espacenet service of the selected national office in the corresponding national language.

Some countries also offer English in addition to their national language.

Viewing Espacenet in Greek

- For an overview of all countries participating in Espacenet and the available interface languages, go to http://www.epo.org/searching-for-patents/technical/espacenet/national.html.

Espacenet in Japanese, Chinese or Korean

Espacenet provides extra links for quick switching to the three main Asian languages.

- Open the Related links section on the left-hand side of the screen.
  - The links to the Asian language versions are available at the bottom of the list: Japanese, Chinese and Korean.
- Select the language you want to use.
Links to Espacenet in Japanese, Chinese and Korean

You then see Espacenet in the selected language.

Viewing Espacenet in Japanese
Configuring browser cookies

Many website functionalities make use of local data storage and caching, i.e. when you are viewing the website, your browser stores so-called cookies and temporary internet files on your computer. Cookies are small text files containing information like access date, referral URL, search terms or user name – data that is transmitted by your browser when you visit a website.

- **First-party cookies** are set by the website you are currently viewing.
- **Third-party cookies** are set by other websites whose services are integrated into the first-party website (e.g. internet maps, media feeds, advertisements, website statistics).
- **Session cookies** live in the browser's temporary memory; they are not written to your computer's hard disk and will be deleted when the browser is closed. Session cookies are necessary for many websites where a login is required or where data is entered, e.g. in a shopping basket.

If your browser is configured with the default settings, you will not encounter any problems when using Espacenet. However, if security is set to a higher level or is restricted – which is the case in most companies – it is very likely that you will need to adjust your browser's settings to allow cookies from Espacenet.

You must enable first-party cookies in your browser to use the following functions in Espacenet:

- Result list
- My patents list
- mosaic view
- downloading or printing all pages of a document from the PDF viewer
- settings: query history, highlighting, classification popup

There are many different ways of configuring browser options, depending on the software version and operating system running. We can only provide a very general overview for the most common browsers. Please ask your system administrator or your internal IT support if you need detailed information.

**Microsoft Internet Explorer**

The following instructions are valid for Internet Explorer 11 on Windows 8.1 Pro and Windows 7 Pro/Ultimate.

1. Start Microsoft Internet Explorer.
2. Click on the tools icon at the top right of the screen or click **Tools** in the menu bar.
Select **Internet options**.

Click on the **Privacy** tab.

The default setting is **Medium**. This enables most websites to set first-party and third-party cookies.

If you find **Custom** or a higher setting than **Medium** here, it could happen that some websites do not work as expected.

Click on **Advanced**.

Privacy settings in the Internet Options of Internet Explorer

To change the cookie setting individually, activate the **Override automatic cookie handling** check box.

Under **First-party Cookies**, select **Accept**.

Under **Third-party Cookies**, select **Block**.

Espacenet does not require third-party cookies and it is always a good idea to exclude unwanted services.

Selecting **Prompt** is not recommended, because you will be irritated by hundreds of website prompts a day, asking you to allow them to set a cookie.

Select the **Always allow session cookies** check box.

Click **OK**.
Setting individual options for cookie handling in Internet Explorer

The Privacy settings have now changed to **Custom**.

/   Click **OK** to save your modified internet options.

Privacy settings set to Custom in Internet Explorer

**Mozilla Firefox**

The following instructions have been tested with Mozilla Firefox version 33.x on Windows 7 Pro/Ultimate and Mozilla Firefox version 38.x.

/   Click on the menu button [1] at the top right of the screen.

/   Click on **Options** [2].

/   Click on the **Privacy** tab [3].
Under **History**, the default setting is **Firefox will: Remember history**. This means that cookies are allowed and temporary internet files are stored on your computer's hard disk.

/ To set your history options individually, change the drop-down field to **Use custom settings for history** [4].

/ Select the **Accept cookies from sites** check box [5].

This means that first-party and third-party cookies are allowed.

/ To disallow third-party cookies, select **never** from the **Accept third-party cookies** drop-down field.

/ Set the **Keep until** field to **they expire**.

This enables Espacenet's first-party cookie for **My patents list** to be saved.

Do not select **I close Firefox**, because this will delete the cookie and **My patents list** will be empty the next time you go to the Espacenet website.

/ To save your modified privacy options, click **OK**.

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**Privacy settings for cookies in Mozilla Firefox**

**Google Chrome**

The following instructions have been tested with Chrome 43.x on Windows 8.1 Pro.

/ Click on the menu button at the top right of the screen.

/ Click on **Settings**.

/ Click on **Show advanced settings...** at the bottom of the screen.
Under **Privacy**, click on **Content settings**.
Privacy settings in Google Chrome

/ Under **Cookies**, select **Allow local data to be set**.

This means that first-party and third-party cookies are allowed.

Do not select **Keep local data only until you quit your browser**, because this will delete the **My patents list** cookie set by Espacenet.

/ Select the **Block third-party cookies and site data** check box.

/ To see the existing cookies and delete them if required, click on **All cookies and site data**.

/ To save your modified privacy settings, click **Done**.
Individual cookie settings in Google Chrome
Disabling the autocorrect function for German

The autocorrect function is a convenient feature when you are writing and editing texts in word-processing software, but it can have unintended effects when you enter search terms in a web-based application running in your browser.

If the default input language is set to German and the autocorrect function is activated, the first word of a line is automatically capitalised when you type the second word. The result is that your search terms are changed, which is more annoying than helpful when you are searching in Espacenet.

For example, if you enter the term *espresso machine* in Smart search, the autocorrect function will change this to *Espresso machine*.

Unwanted autocorrection of search terms with German as default input language

Because the word is capitalised, Smart search will recognise *Espresso* as a name and not as ordinary text, and will return results where the applicant or inventor data contains the word *Espresso*. The word *espresso* is not highlighted in the titles even if it is actually contained in the text.

Limited search results after autocorrection of search terms

If the default input language is English or French, however, the search terms will not be changed even if the autocorrect function is enabled. Your search will retrieve a considerably higher number of results.
All search results with search terms not changed by autocorrect function

If you do not want to correct your input manually each time, you can disable the autocorrect function.

Microsoft Internet Explorer on Windows 7

In Internet Explorer 10 and 11, the spell-checker and the autocorrect function are handled by a browser plug-in which you can deactivate.

/ Start Microsoft Internet Explorer.
/ Click on the tools icon at the top right of the screen or click on **Tools** in the menu bar.
/ Select **Manage add-ons**.
/ In the **Add-on Types** list to the left, select **Spelling Correction**.
/ Deselect the **Enable spelling correction** check box.
/ To save your settings, click **Close**.
Windows 8.1

In Windows 8.1, the autocorrect option has been integrated into the system settings.

/  Click on the **PC settings** tile on the Windows Start screen.
/  Select **PC and devices** and then go to **Typing**.
/  Under **Spelling**, set **Autocorrect misspelt words** to **Off** (it is **On** by default).
/  If you do not want to see the wavy red lines under the words, set **Highlight misspelt words** to **Off** as well.
Changing Espacenet settings

Espacenet settings are stored in browser cookies. You should therefore verify that your browser accepts first-party cookies from Espacenet. Bear in mind that your customised settings apply only to the specific browser on the specific computer that you were using when changing the settings.

On the **Settings** tab, you can manage the following settings:

- Query history – disabled by default
- Classification popups – enabled by default
- Highlighting – enabled by default

### Default settings in Espacenet

#### Query history

/ To enable the query history, tick the box under the **Settings** tab.

/ Choose the number of query history entries to be saved from the dropdown menu: 10 (default), 25 or 50 queries.

/ The query history is now saved until you disable it or delete the cookies.

If you are interested, you can view the contents of cookies, for example in Mozilla Firefox:

/ Click on the menu button at the top right of the screen and select **Options**.

/ Click on the **Privacy** tab.

/ Double-click on the **espacenet.com** folder to expand the list of cookies set by Espacenet.
Select a cookie to see its contents, e.g. `MaxItemsInQueryHistory`.

Example of the Query history cookie in Mozilla Firefox

**Classification popups**

Classification popups are enabled by default. When you click on a CPC classification symbol in the result list, in the **Bibliographic data** screen or in the **INPADOC patent family** screen, the relevant details of the CPC scheme are displayed in an overlay window. The classification popup shows the selected symbol in the hierarchical structure of the classification scheme, including descriptions and images of the relevant sections.
Information on a classification symbol in the classification popup

Sometimes the information will not fit into the popup window, which makes it hard to read.

/  To disable the classification popup, deselect the Enable classification popups check box.

  Now when you click a classification symbol, the Classification search screen opens and displays the selected symbol in the classification system.
Information on a classification symbol in the Classification search screen

**Highlighting**

The highlighting of search terms in the search results is enabled by default. All search terms that have been found are marked by a yellow background wherever they appear in the result list and in the patent document data.

To disable the highlighting of search terms, deselect the *Enable highlighting* check box.
Bibliographic data: AU2010207886 (A1) — 2011-08-11

Espresso machine with grinder dosing control

Page bookmark: AU2010207886 (A1) — Espresso machine with grinder dosing control

Inventor(s): CON PSAROLOGOS; DAVID CH/ENPORT. RICHAR/NOARE

Applicant(s): BREVILLE R & D PTY LTD

Classifications:
- International: A47J23/42; A47J24/4; A47J24/44
- Cooperative: A47J23/42; A47J24/42; A47J24/44; A47J24/48; A47J24/44

Also published as:
- WO20100900135 (A1)
- WO20100098800 (A1)
- AU2009207886 (A1)
- AU2009207886-V1001 (A1)
- AU2009207886-V1002 (A1)
- AU2009207886-1001-1002 (A1)

Abstract of AU2010207886 (A1)

Translate this text into:
- Albanian
- [Select language]

An Espresso machine has a built-in coffee grinder. An electrical switch toggles between a one cup dose and a two cup dose. The switch works in conjunction with a dose strength adjustment. Alteration of the dose strength adjustment alters the dose strength for both the one cup and two cup dose settings. The internal coffee grinder dispenses a shot of coffee into a portafilter that is held in a hand held support bracket. A spring loaded, the upper burr head of the grinder is released by a bracket. The combination of upper burr head and bracket allows the upper burr head to removed and replaced without having to re-set the grind size.
Getting help

Online assistance is available from the Espacenet user interface at any time. You can also download the complete user guide from the EPO website at http://www.epo.org/searching/free/espacenet.html.

Online help

The online help provides an overview of all help topics and a search function.

/ Click on Help in the main navigation.
  . The Help overview screen is displayed.
/ Go to the help topic you are interested in.

The Help overview screen in Espacenet

Quick help

The Quick help section on the left provides short answers to the most frequent questions in the context of the currently viewed screen.

For example, when you are in the Advanced search screen, Quick help lists questions related to the search fields in Advanced search.
To view the **Quick help** answer, move your mouse cursor over the link text.

**Quick help answer related to the Advanced search screen**

**Field help**

All search fields and some bibliographic fields provide extra information about what to enter or how to read this data.

To see the field help, move your mouse cursor over the i-symbol next to the field name.

**Field help for the Smart search field**

**Online tutorial**

With the Espacenet Assistant e-learning tool, you can learn how to use Espacenet. A collection of interactive learning modules allows you to select the topics you are interested in and to test your knowledge.

http://application.epo.org/wbt/espacenet/

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The Adobe Flash browser add-on is required to access the e-learning tool.
Contact EPO Customer Support

You can contact the Espacenet helpdesk via email if you have any more questions.

/   Click on Contact at the top right of the screen.

   A new email message to espacenet@epo.org is created and opens in your default email program.
Choosing the appropriate search function

In Espacenet, you can search for patent documents and patent applications with Smart search, Advanced search and Classification search.

**Smart search** is the default option when you go to the Espacenet home page.

2. Select your preferred search function by clicking on the relevant tab in the search navigation.

**Smart search** [2] is a good option if you are new to patent search. You can enter a single search term or a combination of search terms, including names, dates and classification symbols. If you know the application number, publication number or priority number, you can easily find a specific patent document in Smart search.

*Example:* You are interested in espresso machines published by Italian applicants.

**Advanced search** [3] is the best option if you want to search in the bibliographic data and the abstract (where available) and to combine various search terms. When searching in the European publication database, you can also search the full text of descriptions and claims.

*Example:* You are looking for patent documents having the word display in their titles, published in 2012 and with Lenovo as the applicant.

**Classification search** [4] is the right option if you are interested in finding all the patent publications in a particular technical area. Being a powerful tool used by professional patent searchers, it can take a while to get used to, but it is usually worth the effort.

*Example:* You are researching in the field of lactose intolerance and want to find out which medical treatments have been patented by your competitors.
The following table compares the three search functions. Note that the total number of search terms is identical, but the default operators which are used by the different search functions apply a different logical structure to the query.

<table>
<thead>
<tr>
<th>Query rules</th>
<th>Smart search</th>
<th>Advanced search</th>
<th>Classification search</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search term entry</td>
<td>Total maximum: 20 search terms. Maximum per search criterion (e.g. applicant): 10 search terms</td>
<td>Total maximum: 20 search terms Maximum per field (e.g. title): 10 search terms</td>
<td>Total maximum: 10 search terms (keywords or classification symbols)</td>
</tr>
<tr>
<td>Default operator</td>
<td>AND for all search terms in the field</td>
<td>OR within:</td>
<td>AND for all search terms in the field</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- application number</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- publication number</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- priority number</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- publication date</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>AND within:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- title</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- title or abstract</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- keyword(s) in full text (*)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- applicant(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- inventor(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- CPC</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- IPC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AND for combining fields</td>
<td></td>
</tr>
</tbody>
</table>

(*) only available if searching in the full-text databases
Choosing the patent collection (database) to search in

By default, the Espacenet search engine uses the Worldwide database, which hosts patent documents from all over the world. Depending on your purpose, however, it might be interesting to specialise in one of the other databases connected to Espacenet.

Which database should I choose?

- The Worldwide database contains the complete collection of documents available in Espacenet and forms a good basis for most searches. The search is made for patent applications that have an English-language title and/or abstract. Alternatively you can select from one of the three full-text databases to search in the description and/or claims in the language of the chosen database.

Worldwide – collection of published applications from 90+ countries

Select the Worldwide database if you are searching for information on published patent applications and granted patents from all over the world. You can only use English terms to search the Worldwide database.

Worldwide EN – collection of published applications in English

Select this database to search in the full text (description and claims) with English terms to retrieve all documents published in English from the Worldwide database.

Worldwide FR – collection des demandes publiées en Français

Select this database to search in the full text (description and claims) with French terms to retrieve all documents published in French from the Worldwide database.

Worldwide DE - Sammlung veröffentlichter Anmeldungen auf Deutsch

Select this database to search in the full text (description and claims) with German terms to retrieve all documents published in German from the Worldwide database.

Selecting the database

In Advanced search, the search mask includes a field labelled Select the collection you want to search in.

- Open the drop-down menu by clicking on the blue arrow button to the right.
- Choose the database as appropriate.
Selecting the database in the Advanced search screen

Note how the search mask changes according to your database selection:

- If you select one of the full-text databases, the **Keyword(s) in title, abstract and full text** field appears instead of the **Title** and **Title or abstract** fields.

- The sample search terms that are displayed at the top right of every field adapt to the selected database.

In **Smart search**, the database selection is initially not available. As soon as you run your first search, you will see the **Refine search** link in the breadcrumb navigation on top of the **Result list** screen.

/ To go back to the **Smart search** screen and modify your search options, click on **Refine search**.

Result list after running a query in Smart search

- The **Smart search** screen is displayed, now featuring the database selection.
In **Classification search**, there is no database selection at any time. After running a classification search, the **Result list** screen shows the **Refine search** link in the breadcrumb navigation.

To change the database selection, click on **Refine search**. The **Advanced search** screen is displayed, allowing you to modify your search options including the database selection.
Searching with Smart search

*Smart search* is the default setting when you go to the Espacenet home page. The *Smart search* screen provides one large field for your query.

In the *Smart search* screen you can enter your query with or without field identifiers.

- **A field identifier** is an abbreviation for the bibliographic field to which the search for a specific term will be limited.

If you do not enter field identifiers, the search engine analyses the terms in your entry, applies the default field identifier and searches in the matching bibliographical fields of the Espacenet database.

<table>
<thead>
<tr>
<th>Input example</th>
<th>Search term type</th>
<th>Default field identifier</th>
<th>Bibliographical field(s) searched</th>
</tr>
</thead>
<tbody>
<tr>
<td>engine</td>
<td>Text</td>
<td><strong>txt</strong></td>
<td>Title, Abstract, Inventor, Applicant</td>
</tr>
<tr>
<td>diesel</td>
<td>(word starting with a lowercase letter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>display</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siemens</td>
<td>Name</td>
<td><strong>ia</strong></td>
<td>Inventor, Applicant</td>
</tr>
<tr>
<td>Jura</td>
<td>(word starting with a capital letter followed by only lowercase letters)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Miller</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catherine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ep, it, us</td>
<td>Number</td>
<td><strong>num</strong></td>
<td>Publication number, Application number, Priority number</td>
</tr>
<tr>
<td>ep10000000</td>
<td>(letters + digits)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nl19981010536</td>
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<td></td>
</tr>
<tr>
<td>wo2014nl50211</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A47J31/42</td>
<td>Classification symbol</td>
<td><strong>cl</strong></td>
<td>Classification (CPC or IPC)</td>
</tr>
<tr>
<td>b03</td>
<td>(letters + digits + slash)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>Date</td>
<td><strong>pd</strong></td>
<td>Publication date</td>
</tr>
<tr>
<td>2005-05</td>
<td>(digits + separator characters)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.05.2005</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Starting a search with keywords

/ Enter your query into the **Search term(s)** field.

You can enter one or more search terms. The search terms are not case-sensitive with one exception: if you want to search for a name, then enter the name with an initial capital, e.g. *Lenovo tablet display.*
To delete the search terms from the field, click on **Clear**.

To run the query, click on **Search** or hit the **Enter (Return)** key.

For more experienced users, Smart search also accepts command-line searches. The query language that Smart search understands is CQL (Contextual Query Language). For more information about CQL visit the Library of Congress website at [http://www.loc.gov/standards/sru/cql/](http://www.loc.gov/standards/sru/cql/).
Understanding default field identifiers in Smart search

If you do not enter operators or field identifiers into the Smart search field, the search engine analyses the search terms and interprets which search criteria each word is.

/ To see the search query used by the search engine, check the grey area above the search results list.

Search query interpretation with field identifiers and default operator

If you do not see your search terms in the Result list, they have been found in the abstract or in other data which is not included in the result list (e.g. the application number or the priority number).

/ Click on the title of an application to view its Bibliographic data.

The search terms are highlighted, in this example in the Abstract section.
Rules for default field identifiers

1. If no search operator is entered, search terms are connected by the AND operator.
   - Enter *coffee grinder*.
   - Enter *coffee and grinder*.
     - Resulting search term(s) in both cases: **txt = coffee and txt = grinder**

2. Words starting with a capital letter followed by lowercase letters are interpreted as inventors' or applicants’ names.
   - Enter *Reader*.
     - Resulting search term(s): **ia = Reader**

3. Words starting with lowercase letters are interpreted as keywords in the title or as part of a name or address.
   - Enter *reader*.
     - Resulting search term(s): **txt = reader**

4. Numbers in a date format are interpreted as publication date.
   - Enter *03/2014*.
     - Resulting search term(s): **pd = 03/2014**
Enter **05.03.2014**.

- Resulting search term(s): `pd = 05.03.2014`

5. 6-digit numbers preceded by the year **YY** and the two letters **ep** are interpreted as European application number. When entered, the database searches for the publication number.

‡ Enter **ep99203729**

- Resulting search term(s): `ep19990203729`

6. 7-digit numbers preceded by the two letters **ep** are interpreted as European publication number.

" Enter **ep1000000**.

- Resulting search term(s): `num = ep1000000`

7. Two letters followed by a specific number of digits are interpreted as publication number, application number or priority number.

" Enter **WO2011156929**.

- Resulting search term(s): `num = WO2011156929`

" Enter **CH20130035313**.

- Resulting search term(s): `num = CH20130035313`

8. Two letters conforming to the two-letter codes in the EPO's list of country codes are interpreted as publication number, application number or priority number.

" Enter **it**.

- Resulting search term(s): `num = it`

9. Terms starting with a letter followed by digits and characters conforming to the CPC or IPC symbol pattern are interpreted as classification symbol.

" Enter **b02 b03**.

- Resulting search term(s): `cl = b02 and cl = b03`

" Enter **h05g1**.

- Resulting search term(s): `cl = h05g1`

**Combining multiple search criteria without field identifiers**

You can search more effectively with Smart search if you enter several search terms at once. The search terms will be connected by the default operator **AND**.

Moreover, if you limit yourself to the default field identifiers, your query string can be both short and effective:
Enter *air conditioner LG Electronics 2010 F24F1*.

The search returns applications from *LG Electronics* with the words *air conditioner* in the title, which were published in 2010 and to which the CPC or IPC symbol *F24F1* has been assigned.

If you do not want to have your search terms connected with **AND**, you must enter **OR** and use appropriate parentheses:

Enter *air conditioner LG Electronics 2010 (F24F11 OR F25B13)*.

The search returns applications from *LG Electronics* with the words *air conditioner* in the title, which were published in 2010 and to which the CPC or IPC symbol *F24F11* and/or *F25B13* has been assigned.
Using field identifiers in Smart search

Smart search reveals its full power when you combine search terms with field identifiers. Field identifiers enable you to phrase your query more precisely by assigning the search terms to specific bibliographic fields.

- A field identifier is an abbreviation for the bibliographic field to which the search for a specific term will be limited.

For a list of all field identifiers with examples, see the Reference.

Single field identifier

Connect the field identifier to the search term by an equal sign (=).

You can enter the = with or without additional blanks, e.g. pa=Samsung is equivalent to pa = Samsung. You may feel, however, that the structure of your query is clearer if the field identifiers are directly connected to the relevant search terms without any blanks.

Multiple field identifiers

You can use one or more field identifiers in your search query. The more identifiers and keywords you use, the more precise your search results will be.
// Enter `pa=novartis` to find applications filed by Novartis.

Keywords are not case-sensitive if used together with field identifiers, i.e. names can be entered in lowercase.

// Enter `pa=novartis ti=diabetes` to find applications by Novartis where the word diabetes appears in the title.

The default operator is **AND**, i.e. hits will include both terms in the indicated fields.

// Enter `pa=novartis ti=diabetes pd=2013` to find applications by Novartis published in the year 2013 where the keyword diabetes appears in the title.

<table>
<thead>
<tr>
<th>Result list</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 results found in the Worldwide database for: pa = Novartis and ti = diabetes and pd = 2013 using Smart search</td>
</tr>
</tbody>
</table>

- **GLYCOSIDE DERIVATIVES AND THEIR USES FOR THE TREATMENT OF DIABETES.**
  - **Inventor:** BEBERNITZ GREGORY
  - **Applicant:** NOVARTIS AG (CH)
  - **CPC:** A61K31/70/A
  - **Publication Info:** 2011-11-02
  - **Priority date:** 2009-08-31

- **ADAMANTYL O-GLYCOSYL DERIVATIVES AS INHIBITORS OF DIPEPTIDYL PEPTIDASE FOR THE TREATMENT OF DIABETES.**
  - **Inventor:** KITTELBRANN MATTHIAS
  - **Applicant:** NOVARTIS AG (CH)
  - **CPC:** A61K31/70/A
  - **Publication Info:** 2007-11-02
  - **Priority date:** 2005-08-31

- **Mammalian-derived insulin (mDI) cell method of generating the same and use thereof in the preparation of a medicament for treating diabetes.**
  - **Inventor:** ZAGUIN ALEXANDER
  - **Applicant:** INSURETHIPEUTICS (US)
  - **CPC:** A61K31/70/A
  - **Publication Info:** 2011-01-24
  - **Priority date:** 2006-11-02

- **5-Cyclo[2.1.1]octadiene-1-sulfonamido and 3-cyclo[2.1.1]octadiene-9-sulfonamido derivatives useful in the treatment of impaired glucose tolerance and diabetes.**
  - **Inventor:** BEBERNITZ GREGORY
  - **Applicant:** NOVARTIS AG (CH)
  - **CPC:** A61K31/70/A
  - **Publication Info:** 2012-09-14
  - **Priority date:** 2009-08-31

Search results for applications by Novartis published in 2013 concerning diabetes

**Multiple keywords for a field identifier**

If your search term consists of more than one word in a specific order, the words must be enclosed in inverted commas (quotation marks). Otherwise, the search engine uses the default search criterion for those search terms which are not directly connected to a field identifier.

// Enter `ti="diesel engine"`. Applications with the word sequence **diesel engine** in the title are found.
Enter `ti=diesel engine`.

Resulting search term(s): `ti = diesel and txt = engine`.

Applications with the word `diesel` in the title and the word `engine` anywhere in the title, in names or in the abstract are found.
Searching with Advanced search

**Advanced search** allows you to find patent applications using more than one search criterion, for example:

- Applications from a specific applicant in a particular year
- Applications from a particular applicant with specific words in the title or abstract
- Applications by a specific inventor that fall under a specific classification symbol

By default, **Advanced search** uses the Espacenet Worldwide collection.

To limit your search to a full-text database (Worldwide-DE, Worldwide-EN and Worldwide-FR), change the option in the drop-down list as appropriate.

The **Advanced search** screen provides ten separate search fields for the Worldwide collection, with the keyword search fields **Title** and **Title and abstract**. The full-text collections have nine separate search fields, with one single keyword search field for searching in the **title, abstract and full text**. These fields are grouped by the type of criterion:

- Keywords (must be entered in English for the Worldwide database. English, French and German keywords can be entered in the full-text databases Worldwide-DE, Worldwide-EN and Worldwide-FR).
  - Title (Worldwide only)
  - Title or abstract (Worldwide only)
  - Title, abstract and full text (Worldwide-DE, -EN, -FR only)
- Numbers
  - Publication number
  - Application number
  - Priority number
- Dates
  - Publication date
- Names (persons or organisations)
  - Applicant(s)
  - Inventor(s)
- Classification
  - CPC
  - IPC
When you enter multiple search terms, the default operators are applied according to the following rules:

- Numbers and dates use **OR** within the same field.
- Keywords, names and classifications use **AND** within the same field.
- Combining the fields always uses **AND**.

**Running a search with combined search criteria**

/ Enter the search terms in the appropriate fields using the appropriate operators.

*Example:* You want to find documents published in 2012 in the United States or Canada where the applicant is Samsung and the keywords dual sim occur in the title.

“ In the **Title** field, enter **dual sim**.

No operator is required because **AND** is the default operator for search terms in text fields.

“ In the **Publication number** field, enter **us ca**.

No operator is required because **OR** is the default operator for search terms in number fields.

“ In the **Publication date** field, enter **2012**.

“ In the **Applicant(s)** field, enter **samsung**.

/ To delete all the search terms from all the fields, click **Clear**.

/ To run the query, click **Search** or hit the **Enter (Return)** key.
Entering search terms in the Advanced search screen
Entering search terms

The following rules apply to entering search queries in Smart search or Advanced search in general (see separate instructions for spelling rules):

Number of search terms

- A maximum of ten terms per searchable bibliographic data (e.g. publication number) are allowed.
- 20 terms in total are allowed.
- Terms reserved for operators (AND, OR, NOT, ALL, ANY) can be used only in connection with other keywords and not as a single search term.
- A maximum of 19 operators can be entered together with a maximum of 20 search terms.

If the number of terms that you enter exceeds these limits, the Invalid query screen will display an error message to that effect.

Spacing and blocking of search terms

- Use spaces or commas to separate multiple terms, e.g. diesel engine or diesel,engine.
- Use inverted commas (quotation marks) (") to enclose multiple terms if the precise word order is to be respected, e.g.:
  
  “In Smart search, enter ti = “laser scanning microscope”.
  “In Advanced search, enter “laser scanning microscope” in the appropriate field.

- Make sure that you do not exclude results that may be relevant. For example, a search for interactive toy will exclude applications with the title interactive talking toy.

Upper and lower case

- Search terms are not case-sensitive if entered in combination with a field identifier in Smart search, e.g. pa = siemens or if entered in the search fields dedicated to names in Advanced search, e.g. the Applicant(s) field.
- If entered without a field identifier in Smart search, terms that should be treated as names must be written with a leading capital letter. Only the first letter must be in uppercase, regardless of the official spelling of a name, e.g. Jura is equivalent to JURA.
Limitations on searching with keywords

- Not every part of some very old documents is indexed, so such documents may be hard to find using keywords.

- Some documents do not have translated titles or abstracts. This mainly applies to documents published before 1970 and to very recent submissions for which translations are not yet available. For this reason, you will not find them using English keywords. You will have to use other search criteria such as classification.

- If documents are published in languages that use non-Latin alphabets (e.g. Cyrillic, Greek or Japanese), names are not searchable, and neither are the title and abstract if they have not been translated into English.

- Not all documents have a Cooperative Patent Classification (CPC) symbol allocated to them, or the CPC symbol has not been assigned yet. In that case, a patent application will not be found if a search term in the **CPC** search field (in Advanced search) or an appropriate field identifier (in Smart search) is assigned.
Spelling search terms

When searching in Espacenet, there are general rules for spelling keywords. Some particular rules apply only to the Worldwide database or to the full-text databases.

Language of keywords

Using English terms will yield the highest number of results, because titles and abstracts of most patent applications are available at least in English. However, searching in another language may be advantageous in certain cases, for example if the title or abstract has been supplied by a national patent office without an English translation.

Worldwide database (default)

- When searching in the title or abstract in the Worldwide database, you should enter your keywords only in English.


- When searching in the title, abstract or full text in the full-text databases, you can enter your keywords in the corresponding languages of these databases.
- When searching in the full text (i.e. description and claims), you will only find applications that have been filed in the language in which you enter the search terms.
- To find language variations in the databases, you can enter your search term in different languages connected by the \textit{OR} operator.
  - In Smart search, enter \texttt{ti=keyboard OR ti=clavier OR ti=tastatur}.
  - In Advanced search, enter \texttt{keyboard OR clavier OR tastatur} in the appropriate field.
  - Consider different translations and grammatical forms of a term if you do not find what you expect.

Diacritics and ligatures

- Diacritics are umlauts and characters with accents, tildes or cedillas (\texttt{ä}, \texttt{ö}, \texttt{ü}, \texttt{é}, \texttt{è}, \texttt{ê}, \texttt{ń}, \texttt{ç} and the like). Ligatures are characters that have historically been joined from two characters but are now one character (\texttt{œ}, \texttt{æ}, \texttt{ß} and the like).
Search terms containing diacritics and ligatures can be entered in Espacenet, but they will retrieve different search results.

- When searching for a name in **Advanced search** in the **Applicant(s)** or **Inventor(s)** field:
  - the search ignores the diacritic or ligature and searches for the term in either spelling, e.g. `bäcker` or `backer`, `lefèvre` or `lefevre`, `großmann` or `grossmann`.

- When searching for a name in **Smart search** using a capitalised search term:
  - the search engine identifies capitalised words with diacritics as text and capitalised words without diacritics as names. The corresponding field identifier is applied, retrieving similar, but not identical search results.
    - `Lefèvre` will be treated as `txt = Lefèvre`
    - `Lefevre` will be treated as `ia = Lefevre`

- When using a field identifier in **Smart search**:
  - both spellings will return the same result, e.g. `ia=großmann` and `ia=grossmann`.

**Special characters**

Many names or technical terms contain special characters like hyphens (­), apostrophes (’), forward slashes (/) or ampersands (&).

- When searching in the Worldwide database, search terms with special characters do not retrieve any results.
  - Replace special characters with blank spaces and group the words with quotation marks, e.g. enter
    - "x ray" instead of `x-ray`
    - "Procter Gamble" instead of `Procter&Gamble`

- When searching in the full-text databases, special characters can be entered, apart from the following forbidden special characters.

**Forbidden special characters**

The special characters question mark (?) and asterisk (*) are not allowed because these characters are reserved as wildcards for the truncation search. Other forbidden characters are plus (+), colon (:) and per cent (%).

If you enter a search term containing a forbidden character, the **Invalid query** screen will display an error message to that effect.
Searching with keywords in the title or abstract

Searching in the title will produce fairly precise results, whereas searching in the title or abstract will include a broader set of results.

The title is the technical designation of an invention and consists of a short text, often one sentence, summarising the contents of the application. In the case of documents not originally written in English, the title is often an English translation of the title of the document published.

If you know the exact term or terms contained in the title of the patent document you are searching for, enter this/these in the Title field (Advanced search) or use the ti field identifier (Smart search).

The keywords are highlighted in the title, but not in the abstract.

Keywords found in the title of an application

The abstract of a patent document is a concise summary of the invention contained in the description, the claims and drawings. It may, however, also be the English translation of the abstract of a document which was not originally written or published in English.

If you want to restrict the search to the abstract, use the ab field identifier in Smart search.

Advanced search, however, does not provide a dedicated field for the abstract.

If you are uncertain whether a term you are searching for is actually contained in the title of a document or its description, enter the term(s) in the Title or abstract field (Advanced search) or use the ta field identifier (Smart search).
The keywords are highlighted in both the title and the abstract.

Keywords found in the title and abstract of an application
Searching with names

Patent applications can be filed under both the name of a person (i.e. a natural person) and that of an organisation (i.e. a legal entity).

When searching with names, select the search function which suits your purpose best:

- If you do not know whether the person or organisation you are looking for is an applicant or inventor, use the **Smart search** function.

- If you know the role of the person or organisation to be queried, use the **Advanced search** function and enter the name in the corresponding field.

Names are not case-sensitive when entered in one of the name fields in **Advanced search** or when entered together with the appropriate field identifier in **Smart search**.

Standardised and unstandardised names

When you search for an applicant or inventor name, the Espacenet search engine looks for both the unstandardised name and the standardised name in the database:

- The **unstandardised name** is the name as entered by the applicant in the Request for grant form. This is the name that will be shown on the original document.

- The **standardised name** is the name as assigned by the EPO. This is the name that will be shown in the result list and in the bibliographic data, even though the name on the original document might be the unstandardised name.

- Names are always shown in capital letters, regardless of the original spelling.

Example

A company may have been assigned a different name to the one you are thinking of, for example:

/ Enter **Nikon** or **NIKON** in the **Applicant(s)** field in Advanced search.

Most hits in the result list show **NIPPON KOGAKU KK**, which is the standardised name for **NIKON CORPORATION** or **NIKON CORP**.
To see the unstandardised name in the bibliographic data, click on the relevant application title.

Click on the + icon to the right of the applicant's name. The unstandardised name is displayed.

If your search does not return the expected results for an applicant's name, the reason may be that these patents have been sold to another company or that the applicant uses a different name today. However, the name of the applicant at the date of filing remains registered in the database and therefore accurate information about new
applicants/patent holders is not available in Espacenet. As far as EP and Euro-PCT documents are concerned, you can search in the European Patent Register, where the original applicant's name too will be retrieved from the file history.

**Entering names of natural persons**

Both the applicant for a patent and the inventor of an object can be an individual or more than one person. The applicant may also, but need not, be the inventor.

The entries for natural persons consist of the surname and first name:

- The surname precedes the first name in most cases, e.g. **Miller Christopher**.
- A comma is frequently placed after the surname, e.g. **Miller, Christopher**.
- First names of applicants are often abbreviated, e.g. **Miller C**.
- Any middle name is placed third, e.g. **Miller Christopher Francis**.
- The middle name is frequently abbreviated, too, e.g. **Miller Christopher D**.

When you search for a person's full name, the surname and the name should be in the correct sequence and enclosed in quotation marks.

For example, to find an inventor called **Christopher Miller**, do the following:

/ In Advanced search, enter "**Miller Christopher**" in the **Inventor(s)** field.
/ In Smart search, enter **in="Miller Christopher"**.

The result list includes hits with persons having a middle name.

Search results for inventor with surname and first name
To see the unstandardised name in the bibliographic data, click on the relevant application title.

Click on the + icon to the right of the inventor's name.

The unstandardised name is displayed.

Inventor's name as originally entered, in this example the sequence first name > middle name > surname was used

Entering names of organisations

The applicant for a patent may be an individual or more than one person or an organisation such as a company or university.

The entry for an organisation is made up of all the words comprising the name of that organisation.

Enter the words in the correct sequence and enclosed in quotation marks, e.g. "British Aerospace".

Search result for an applicant's name consisting of two words
**Acronyms and abbreviations in organisations’ names**

Some company names are registered with the EPO under their full name, others under the acronym.

- If you enter the full words, e.g. "International Business Machines", the result list shows the standardised name **IBM**.

  Combinations of full words and abbreviations are also possible; e.g. if you enter "Siemens Aktiengesellschaft", the result list shows **Siemens AG**.

- If you enter the acronym, e.g. **BMW**, the result list shows the standardised name **BAYERISCHE MOTOREN WERKE AG**.

However, abbreviated terms such as **AG, GmbH, Inc, Corp, Ltd** and the like should not be used as search terms. There are many different ways of spelling such parts of a company's name, but the search engine always uses the search terms exactly as you enter them.

- If you enter an abbreviation using full stops, e.g. "Nikon Corp.", your search will not return any results.

![Result list](image)

*No results found due to incorrect spelling of an abbreviation*

**Searching for inventors or applicants from a specific country**

In most patent applications, the inventors and applicants are mentioned along with a two-letter code for their country of residence or principal place of business. You can include this information in your search to refine your results.

- Enter the two-letter country code enclosed in square brackets, e.g. "Miller Christopher" [GB].

  You may also enter the two-letter code alone, but using square brackets will improve your search results.

  The result list shows hits for **Miller Christopher** and [GB]. Numbers in brackets indicate that there are more inventors listed in the bibliographic data.

- To see all names, click on the title of the relevant application.
Search results for an inventor from a specific country

- The name and country code you were looking for are displayed.

**Bibliographic data:** KR20100061014 (A) — 2010-05-14

**METHOD AND APPARATUS FOR PARTITIONING VIRTUAL WORLDS USING PRIORITIZED TOPIC SPACES IN VIRTUAL WORLD SYSTEMS**

<table>
<thead>
<tr>
<th>Page bookmark</th>
<th>KR20100061014</th>
<th>METHOD AND APPARATUS FOR PARTITIONING VIRTUAL WORLDS USING PRIORITIZED TOPIC SPACES IN VIRTUAL WORLD SYSTEMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventors:</td>
<td>RENHAVA DAVID SEAGER, CHRISTOPHER EDWARD SHARP, GEORGE SYDNEY CHAPMAN</td>
<td>MILLER CHRISTOPHER H, WILKINS RUPERT M</td>
</tr>
<tr>
<td>Applicants:</td>
<td>IBM [US]</td>
<td></td>
</tr>
</tbody>
</table>

The bibliographical data shows all inventors' full names
Searching with numbers

Application numbers and publication numbers are unique IDs that are assigned to the patent document at the time of application and publication, thus clearly identifying a specific document. Priority numbers relate to earlier applications of the same patent family.

If you know the application number, the publication number or the priority number of a patent application, it is very easy to retrieve the file from Espacenet.

If you do not know what the number you are looking for represents or if you are unsure about the exact format, **Smart search** will serve your purpose best.

/ In **Smart search**, enter the appropriate field identifier `ap` (application number), `pn` (publication number) or `pr` (priority number) together with your search term.

  “ If you do not use a field identifier, the search engine will look in all three number fields, applying the default field identifier `num`.

  “ If you run a query with multiple search terms and want to confine your search to a specific country code, add the appropriate field identifier and the two-letter code to your query, e.g. `ti="espresso machine" pr=IT`.

/ In **Advanced search**, enter the number in the appropriate field: publication number, application number or priority number.

  “ To retrieve all the documents having a particular country code, enter the country code (e.g. **GB**) in the relevant number field.

Application numbers

In Espacenet, the application numbers of all countries are standardised in one format, irrespective of the way in which they are printed on the original patent documents. For the majority of countries, application numbers in Espacenet consist of 13 characters following the format **CCYYYYnnnnnnn** and do not include the kind code.

- **CC** country code, two letters
- **YYYY** year of filing, four digits
- **nnnnnnn** serial number, variable, maximum seven digits. Where necessary, the fixed length of 13 digits is achieved by inserting leading zeros.

*Examples: TW20100106238 (original: 099106238), KR20127021522 (original: 10-2012-7021522), FR20130050819 (original: 13 50819)*

- More recent numbers for Germany and for the United States of America consist of 14 characters, e.g. DE201210100825, US201514639715.
Exceptions to the Espacenet standard

Twelve countries/organisations use application numbers in different formats: Australia (AU), Germany (DE), China (CN), Brazil (BR), Ukraine (UA), Gulf Council (GC), Hungary (HU), India (IN), Italy (IT), Mexico (MX), OAPI (OA) and WIPO (WO).

Their application numbers are made up of various combinations of these elements:

- **CC** country code, two letters
- **YYYY** year of filing, four digits
- **LL** "other" information, one or two characters, e.g. region for India, country for international PCT applications
- **nnnnn** or **nnnnnn** serial number, five or six digits

Examples: **CN20131658887**, **IN2013CH06130**, **BR20141005228**, **IT2013MI00351**

**EP application numbers**

/ To find an EP application number in Espacenet, type it in one of these formats:

  " four-digit year, e.g. **EP2007109822**
  " two-digit year, e.g. **EP07109822**
  " two-digit year, omitting the EP country code, e.g. **07109822**
  " two-digit year, omitting the EP country code and adding a check digit, e.g. **07109822.2**

**WO (PCT) application numbers**

/ To find an international WO (PCT) application number in Espacenet, type it in the format **WOYYYYCCnnnnn** (13 characters), omitting the slashes and, where necessary, removing leading zeros.

  " To find **PCT/IB2007/51010**, type in **WO2007IB51010**.
  " To find **PCT/MX2007/000062**, type in **WO2007MX00062**.

WO (PCT) application numbers in the 13-character single format consist of:

- **WO** country code, replacing the letters **PCT** from the original application number
- **YYYY** year of filing, four digits
- **CC** country code of the country where the application was filed, two letters
**nnnnn**  serial number, five digits

**Kind codes**
/  Do not enter the standard kind codes A, B or C, as these types of document are automatically retrieved.
/  To retrieve other documents like utility models or reissued patents from certain countries, enter the appropriate kind code at the end of the application number, e.g. **ES1005422U**, **DE20152001346U**, **KR19910000410U**.

The countries concerned are: Austria (AT), Chile (CL), China (CN), Denmark (DK), Finland (FI), Germany (DE), Japan (JP), Korea (KR), Norway (NO), Poland (PL), Romania (RO), Serbia and Montenegro (YU), Spain (ES), Sweden (SE), Taiwan (TW), Netherlands (NL) and Turkey (TR).

**Publication numbers**

In Espacenet, publication numbers are generally made up of a two-letter country code and a variable serial number of 1 to 12 digits, e.g. **DE202004009768**, **CH708196**, **ES2525965**.

The serial number in a US publication number consists of 11 digits, e.g. **US20040046892**.
/  When typing a publication number, do not leave any spaces between the country code and the number.
/  Do not omit leading zeroes from the serial part of the publication number.

**EP publication numbers**
/  To enter an EP publication number, type in the two-letter EP country code and a seven-digit serial number, e.g. **EP1023455**.

**WO (PCT) publication numbers**

There are three different WO (PCT) publication number formats, depending on the year of publication.

1. **WOyyynnnnn** (from 1978 until 30 June 2002)
2. **WOyyynnnnn** (1 July 2002 to 31 December 2003)
3. **WOYYYYynnnnn** (single format, since 1 January 2004)
You can use any of these formats to enter WO (PCT) publication numbers in Smart search or Advanced search.

/ Where the single format applies, enter the four-digit year or the two-digit year plus the serial number, e.g. **WO2014178204** or **WO14178204**.

/ To use the single format for a publication number issued earlier, add the first two digits to the year and a leading zero to the serial number, e.g. instead of **WO9935053** enter **WO1999035053**.

**Kind codes**

Entering kind codes for publication numbers is recommended for these countries: Austria (AT), Chile (CL), China (CN), Germany (DE), Denmark (DK), Spain (ES), Finland (FI), Japan (JP), Korea (KR), Netherlands (NL), Norway (NO), Poland (PL), Romania (RO), Sweden (SE), Turkey (TR), Taiwan (TW), Serbia and Montenegro (YU).

/ If you know the kind code, enter it at the end of the number, e.g. **ES1005422U**.

**Priority numbers**

Searching for a priority number will retrieve all documents having this priority number in their bibliographic data, i.e. the members of a patent family. Priority numbers are composed in the same way as application numbers.

/ To search for patent documents with the same priority number, enter the application number of the earlier application in the priority number field, e.g. **WO2001US46442**.

/ To search for a priority number that includes the kind code (except the standard kind codes A, B or C), enter the appropriate character at the end of the priority number, e.g. **KR19910000410U**.

**Numbers of historical patent documents**

Some documents in Espacenet may contain an **X** after the country code of the priority number. This is the case in older publications for which the priority country code and priority date are known and recorded but the original application number is not. In such cases a "semi-technical" priority number is created by taking the numerical part of the (dummy) application number and attaching this number to the known country code and the letter **X**.

For example, the original document of publication number **FR1018027** does not mention an application number, but it mentions the date of filing (15 avril 1950) and an earlier application in the United States of America (9 juin 1949).
Thus, in Espacenet the dummy application number of this patent document is **FRD1018027** and the priority number is **USX1018027** – both using the same serial part as the publication number.
Searching with dates

By adding a date criterion to your query you can limit your search to a date or date range, for example when searching for applications in a specific technical field. Using a date as the only search criterion will return a large number of rather unspecific results.

Espacenet provides one dedicated field identifier and one dedicated search field only for the publication date. However, you can search for the filing date and the priority date in the Application number and Priority number fields.

Depending on your intention, you can enter a date as year, month or day in one of the admissible formats.

Smart search

In Smart search, the search engine interprets any search term which is entered in date format as being the publication date.

- To search with the publication date, enter the date without a field identifier.
- To search with the filing date, enter the date with the field identifier ap (application number).
- To search with the priority date, enter the date with the field identifier pr (priority number).

Advanced search

- To search with the publication date, enter your search term in the Publication date field.
- To search with the filing date, enter the search term in the Application number field.
- To search with the priority date, enter the search term in the Priority number field.

Publication date

The publication date is the date on which a patent application is first published, thereby making the patent document part of the state of the art.

In Espacenet, the publication date of Euro-PCT applications displayed in the bibliographic data refers to the document's (A0) publication date on the European publication server.

Only the publication date of the A document is searchable.
If you do not know the exact date when searching with the publication date, it is recommended to enter a month rather than the day. If you enter a date which is not the precise day of the publication, then your search will return zero results.

**Example:** You want to find applications that have been published by the Swiss Patent Office in the months of January and February 2013.

/ In **Smart search**, enter *(201301 OR 201302) AND pn=CH.*

/ In **Advanced search**, enter *201301 201302* in the **Publication date** field and *CH* in the **Publication number** field.

No operator is required in the **Publication date** field, because the default operator for dates is **OR**.

**Search results for publication date and publishing office**

**Entering date ranges for the publication date**

You can search for date ranges of the publication date in **Advanced search** and **Smart search**.

There are a number of alternative entry methods for date ranges. However, the easiest way is to enter the start date (day, month or year), followed by a colon and the end date.

**Example:** You want to find all applications filed by Apple published in between 1 January 2012 and 15 March 2012.

/ In **Smart search**, enter *Apple 20120101:20120315*.

/ In **Advanced search**, enter *Apple* into the **Applicant(s)** field and *20120101:20120315* into the **Publication date** field.
Filing date

The filing date of an application is the date on which it was validly filed, i.e. was deemed to fulfil the filing requirements of the office concerned.

**Example:** You want to find applications for coffee machines filed in October or November 2010.

/ In Smart search, enter `ti="coffee machine" AND (ap=201010 OR ap=201011)`.

/ In Advanced search, enter "coffee machine" in the Title field and **201010 201011** in the Application number field.

/ To see the filing date of an application, click on the relevant title link in the search results.

The Bibliographic data screen displays your search terms highlighted in yellow. The filing date in **yyyyymmdd** format can be found to the right of the application number.

Viewing the filing date in the Application number row of the Bibliographic data screen

Priority date

The priority date is the filing date of the very first patent application for a particular invention. Within 12 months of that first filing, a subsequent patent application for the same invention can be filed claiming this "priority right".

**Example:** You are interested in espresso machines in general and want to find applications for which a priority application was filed in the year 2012.

/ In Smart search, enter `ta=espresso ta=machine pr=2012`.
In Advanced search, enter **espresso machine** in the **Title or abstract** field and **2012** in the **Priority number** field.

The priority date is displayed in the search result list.

Search results for keywords and priority date

A patent application may have multiple priorities, but only the earliest priority date is relevant for the search and will be displayed in the result list.

To check if there are more priorities in the bibliographic data, click on the title link of the relevant application.

The **Bibliographic data** screen displays your search terms highlighted in yellow. The priority date in **yyyyymmdd** format can be found to the right of the corresponding priority number.

Viewing additional priority data in the Bibliographic data screen
Searching with classification symbols

Searching with classification symbols offers advantages over searching with keywords. The results of searching with keywords are less precise the further your choice of words differs from that of the applicant. Certain documents cannot be found with a keyword search because you cannot search for keywords in documents without a title or abstract. However, if these documents have a classification symbol, they can be found using that symbol.

You should bear in mind that when you search with a CPC or IPC symbol, you can only find documents to which a CPC or IPC symbol has actually been assigned. It may therefore be worthwhile carrying out certain searches twice: once using keywords and once using CPC and IPC classification symbols.

/ Enter classification symbols conforming to the pattern of the classification level you require:
   ” class, e.g. **A63**
   ” subclass, e.g. **A63B**
   ” group (main group), e.g. **A63B49**
   ” subgroup, e.g. **A63B49/02**
   ” CPC subgroup, e.g. **A63B49/027**
   ” CPC 2000 series subgroup, e.g. **A63B2049/0282**

Classification symbols are not case-sensitive. You can enter **a63b49** or **A63B49** or any other combination of uppercase and lowercase letters.

/ Do not enter blanks in classification symbols. If you encounter a symbol printed with a blank after the fourth letter or digit, e.g. **A63B 2049/0235**, omit this blank, as otherwise your search will not retrieve any result.

/ Do not use wildcards in classification symbols, e.g. do not enter **A63B49*** if you want to find all child levels of this group. Entering the group alone will automatically retrieve all subgroups.

/ In **Classification search**, enter the classification symbol in the search field and click **Search**.

You can then browse the CPC scheme for more information and find other classification symbols that might also be relevant for your search in a specific technical field. For further and more detailed information, refer to the Classification search section.
In Smart search, enter the classification symbol(s) with or without field identifier.

If you do not enter a field identifier and your search term conforms to the CPC or IPC pattern, the search engine will automatically recognise your search term as a classification symbol and use cl as the general field identifier.

To restrict your search to either the CPC or the IPC, use cpc or ipc as the field identifier as appropriate.

In Advanced search, enter the classification symbol(s) in the CPC or IPC field as appropriate.
Classification combinations sets (C-sets, combi-sets)

In some cases patent applications are assigned more than one classification symbol. This is called a combination set, C-set or combi-set. These are ordered lists of linked CPC symbols created by patent examiners. Combination sets classify technical features in context or "taken in combination". The scope of a combination set can vary across technical fields.

If an application has been assigned a classification combination set, this is displayed in the Bibliographic data panel under C-sets.

Viewing C-sets in the Bibliographic data panel.

Searching for combination sets

To search for patent applications that have a classification combination set containing a single classification symbol (for example: C08F8/30).

† Go to Smart search and enter the field identifier cpcc with the classification symbol.
† Enter cpcc=C08F8/30

To search for a list of patent applications with more than one classification in the combination set.

Example:

† Enter cpcc=C08F8/30 cpcc=C08F297/02 separated by a space.
Using Boolean operators
You can use either of the Boolean operators AND and OR

**AND**

‡ Enter cpcc=C08F8/30 AND cpcc=C08F297/02

**OR**

‡ Enter cpcc=C08F8/30 OR cpcc=C08F297/02

The default Boolean operator for cpcc searches is AND.

Combination set search with proximity operators

To find applications with classifications that are in the same combination set but not directly next to each other in the hierarchy, you can use proximity operators.

*Using prox/distance<3*

‡ Enter cpcc=C08F8/30 prox/distance<3 cpcc=C08F297/02

More proximity operators can be found under Using proximity operators.

Combination set search with comparison operators

To shorten your query and avoid using Boolean operators you can enter the comparison operators *any* or *all* with the classifications in quotation marks.

**Any**

‡ Enter cpcc any "C08F8/30, C08F8/31"

**All**

‡ Enter cpcc all "C08F8/30, C08F8/31"

You can enter up to ten classification symbols in the search field, each separated by a space.
Finding more information in the search results

Hits with matching classification symbols are highlighted in the Result list. Note that most applications have more than one classification symbol. If there are more than three symbols, this is indicated with a number in brackets, e.g. (+4).

To see all classification entries, click on the title link of the relevant application.

Classification symbols highlighted in the search results

The classification symbol you were looking for is highlighted.
Search operators for CPC subgroups

You can use search operators to extend your CPC search to all hierarchically dependent entries. By default, the search is restricted to the classification symbol exactly as you enter it.

- `/low` finds all hierarchically dependent CPC symbols, including the 2000 series.
- `/exact` looks only for the classification symbol exactly as you enter it (default).

In Advanced search, the `/low` operator works only in the **CPC** field; it is ignored in the **IPC** field. In Smart search, you must use the `cpc` field identifier to be able to use the `/low` operator.

/ To retrieve all related subgroups, add `/low` as a suffix to the symbol, e.g. `A63B49/02/low`.

/ To retrieve exactly this subgroup, add no suffix to the symbol, e.g. `A63B49/02` (equivalent to `A63B49/02/exact`).

Search modifiers for IPC symbols

You can use search modifiers to restrict your IPC search to either invention information or additional information.

- `ai`: Invention information is information in patent documents which describes or presents the technical innovations disclosed in the publication and which adds to the prior art.

- `an`: Additional information is non-trivial technical information which does not in itself represent an addition to the state of the art but might constitute useful information for the searcher.
In Advanced search, search modifiers can be used only in the IPC field. In Smart search, the search engine will automatically identify queries containing search modifiers (ai: or an:) as IPC classification searches, which means that entering the ipc field identifier is not necessary.

- Enter the appropriate search modifier as a prefix to the classification symbol, e.g. an:A63B49/02.
- Click on the title of an application to see more details in the Bibliographic data screen.

Search results for applying the an: search modifier with IPC classification symbols

- If you do not find the symbol you were searching for, follow the links to the corresponding documents in the Also published as section.
Classification symbol for additional information is not visible in the bibliographic data

In the Bibliographic data screen, the symbols assigned for additional information are displayed in non-bold characters.

IPC classification symbols in the bibliographic data

Presentation of IPC symbols in Espacenet

The IPC symbols are displayed according to the following priorities:

- Classification symbols allocated by offices using the full IPC come before classification symbols allocated by offices classifying in main groups only
- Invention information comes before additional information
- Current IPC symbols come before old IPC symbols (versions 1-7)
- Old IPC symbols (versions 1-7) are displayed in normal font and prefixed with the label (\textit{IPC1-7}):

The IPC symbols in the result list (and in the documents) are displayed as follows:
• IPC symbols allocated by offices classifying in the full IPC: in italics
• IPC symbols allocated by offices classifying in main groups only: non-italics
• Invention information symbols: bold
• Additional information symbols: non-bold

Old IPC symbols in the bibliographic data
Truncating search terms with wildcards

You can use wildcards to truncate search terms in *Smart search* and *Advanced search*.

The available wildcard symbols are:

* String of characters of any length
? 0 (zero) or 1 character
# Exactly 1 character

If your search should also include the plural form of a word, different endings or alternative spellings, use the appropriate wildcard.

**Examples**
- Enter *screw* to find any word beginning with *screw*, e.g. *screws, screwdriver, screwing, screwer*, etc.
- Enter *screw?* to find the words *screw* or *screws*.
- Enter *Ann#* to find the names *Anne* or *Anna*.

**Rules and limitations**
- Wildcards are always added at the end of a word or part of a word, e.g. *color?* will search for *color* or *colors*.
- Wildcards cannot be followed by an alphanumerical character (inner truncation), e.g. *colo?r* cannot be used to search for *color* or *colour*.
- There must be at least 2 alphanumerical characters preceding a ? or # symbol, e.g. *co?, pa#*
- If 2 alphanumerical characters precede a ? or # symbol, then a maximum of 3 truncation symbols is allowed.
- If 3 or more alphanumerical characters precede a ? or # symbol, then a maximum of 7 truncation symbols is allowed.
- There must be at least 3 alphanumerical characters preceding a * symbol.
- Only one * symbol can be used per search term.
- Using the * symbol can significantly increase the search time.
- Wildcards should not be used for classification symbols. The classification scheme is structured hierarchically anyway, and a search with wildcards may cause the system to slow down or stall.
- Wildcards cannot be used in dates.
- Application numbers cannot be truncated.
In **Smart search**, wildcards in publication numbers or priority numbers must be used in combination with the appropriate field identifier, e.g. *pn=wo2006* or *pr=wo2006*.

If you enter *wo2006* alone, then the search engine interprets this term as text and not as a number, i.e. it will search for *txt=wo2006* and this will most probably not return any results.

If you do not use wildcards properly in your search terms, you will see the **Invalid query** screen with an error message to that effect.
Using Boolean operators

When searching with **Smart search** or **Advanced search** you can enter the Boolean operators **AND**, **OR** and **NOT** into the search fields.

Entering an operator is necessary if you want to apply a specific operator instead of the default operator in the relevant field, e.g. if you want to use **OR** instead of **AND** in **Smart search** or in one of the name fields in **Advanced search**.

Boolean operators are not case-sensitive in Espacenet, therefore **and**, **AND** or **And** are equivalent.

**Narrowing down the search with AND**

**AND** is the default operator. A search with more than one search term will therefore retrieve patent applications that include all the search terms entered.

*Example:* You want to find applications related to video cameras that were filed by Sony and that were published in the year of 2010.

/  
In **Smart search**, enter `pa=sony ti="video camera" pd=2010`.

This query is equivalent to `pa=sony AND ti="video camera" AND pd=2010`.

Not only the operator **AND**, but also the quotation marks and the field identifiers could be omitted. However, note that this short version is not exactly the same. In this example, **Sony video camera 2010** would retrieve the same results as the full query.

/  
In **Advanced search**, enter `sony` into the **Applicant(s)** field, “**video camera**” into the **keyword(s)** field and `2010` into the **Publication date** field.

You do not need to use operators.

**Extending the search with OR**

By entering the **OR** operator you will retrieve patent applications that include at least one of the terms in your query.

*Example:* You want to find applications filed by Jura Elektroapparate or De Longhi Appliances.

/  
In **Smart search**, enter `pa="Jura Elektroapparate" OR pa="De Longhi Appliances"`.

/  
In **Advanced search**, enter "**Jura Elektroapparate**" OR "**De Longhi Appliances**" in the **Applicant(s)** field.

**Restricting the search with NOT**
The **NOT** operator allows you to exclude unwanted search terms from your query. Patent applications that include one search term but not the other will be found.

**Example:** You want to find applications related to printers except inkjet printers.

/ In **Smart search**, enter **ti=printer NOT ti=inkjet**.
/ In **Advanced search**, enter **printer NOT inkjet** into the **Keyword(s)** field.

- Be careful with the **NOT** operator when searching with keywords without field identifiers in Smart search. **NOT** could exclude relevant documents where the excluded search term happens to be present anywhere, e.g. in the title or in an address.
Using comparison operators

*Smart search* allows the use of comparison operators to shorten the search query. Instead of combining several search terms with Boolean operators, you can use one comparison operator and specify the search terms for your query enclosed in quotation marks. The field identifier is required only once, which makes the query easier to type.

**all**

/ Use *all* if you want to include all words in your search, but you do not know the exact order of the words in the title.

/ Enter *ti* all “mouse trap rat”.

This is equivalent to *ti=mouse ti=trap ti=rat* (connected by AND as the default operator).

The search retrieves applications which have all three words in the title.

**any**

/ Use *any* if you want to find any of the words, for example when looking for synonyms.

/ Enter *ti* any “mint spearmint peppermint”

This is equivalent to *ti=mint OR ti=spearmint OR ti=peppermint*.

The search retrieves applications which have at least one of the three words in the title.
Search results for smart search with any
Using proximity operators

- The relation symbols > (greater than), <= (less than or equal to) and >= (greater than or equal to) are currently not supported in combination with the proximity operators. Only < (smaller than) can be applied.
Building nested queries

In *Smart search* and *Advanced search* you can enter multiple search terms into
the search fields. If your search terms should not be connected by the default operator
*AND* one after the other, you need to build nested queries.

Nesting means that one combination of search terms and operator should take
precedence over other combinations or terms in the same search query. Like in
mathematics, you must use parentheses to specify the order in which the search terms
and operators should be interpreted.

The following examples refer to entering a search query into the *Keyword(s) in title*
field in *Advanced search*.

**Expression in parentheses**
The search engine processes the information within parentheses first, and then
processes the information outside parentheses next.

- Enter *(mouse OR rat) AND trap* to retrieve applications containing the word
  *mouse* or the word *rat* together with the word *trap*.

**Nested parentheses**
The search engine processes the innermost parenthetical expression first, then the
next, and so on, until the entire query has been interpreted.

- Enter *((mouse OR rat) AND trap) OR mousetrap* to find applications
  either containing the word *mouse* or the word *rat* together with the word
  *trap*

  “ or containing the word *mousetrap*.

The innermost expression can be positioned anywhere within the search query, i.e.

*((mouse OR rat) AND trap) OR mousetrap*

is equivalent to

*mousetrap OR (trap AND (mouse OR rat))*

or

*(trap AND ((mouse OR rat))) OR mousetrap*.

**Left has precedence over right**
If you do not use parentheses in your search query, then the search engine processes
the search terms and operators one by one, reading from left to right.

- Enter *mouse OR rat AND trap OR mousetrap*.
The search engine complements the parentheses and the resulting search query is 

\[ ((t_i = \text{mouse} \ OR \ t_i = \text{rat}) \ AND \ t_i = \text{trap}) \ OR \ t_i = \text{mousetrap}. \]

Enter \textit{mousetrap OR trap AND mouse OR rat}.

Now, the query becomes 

\[ ((t_i = \text{mousetrap} \ OR \ t_i = \text{trap}) \ AND \ t_i = \text{mouse}) \ OR \ t_i = \text{rat}. \]

This retrieves completely different results than \textit{mousetrap OR (trap AND (mouse OR rat))} with the appropriate parentheses.
Building complex queries

When building a complex query with different search criteria, both Advanced search and Smart search provide distinctive qualities. It depends on your search purpose which method will retrieve the best results.

- In Advanced search, you can use operators in a specific search field to override the default operator for that field. However, the different criteria (i.e. the search terms from the different fields) are always combined with AND.

- Smart search allows to use any operator – including AND – to connect the different search criteria in any combination that you wish.

- Advanced search only requires parentheses within a search field if operators are used for a nested query.

- In Smart search, great care is required to place parentheses, operators and quotation marks correctly.

Example A: You want to find all applications submitted by Siemens Aktiengesellschaft and published between January 2010 and May 2010 with a priority application in the United States of America.

“ In Smart search, enter pa=“Siemens Aktiengesellschaft”
201001:201005 pr=US

Operators and parentheses are not necessary.

“ In Advanced search, enter “Siemens Aktiengesellschaft” in the Applicant(s) field, 201001:201005 in the Publication date field and US in the Priority number field.

Operators and parentheses are not necessary.

Example B: You want to find all applications submitted by Siemens Aktiengesellschaft or Siemens Medical that have been published in 2010 or 2011 with a priority application in the United States of America or in Canada.

“ In Smart search, enter (pa=“Siemens Aktiengesellschaft” OR pa=“Siemens Medical“) AND (pd=2010 OR pd=2011) AND (pr=US OR pr=CA).

Both operators and parentheses are necessary.

“ In Advanced search, enter “Siemens Aktiengesellschaft” OR “Siemens Medical” in the Applicant(s) field, 2010 2011 in the Publication date field and US CA in the Priority number field.

The OR operator is necessary to override AND as the default operator in the Applicant(s) field. An operator is not necessary in the Publication number and Priority number fields, because here OR is applied as the default operator. Parentheses are not necessary.
Searching with Classification search

Classification search can be very helpful in your search for a specific invention if you know what a particular classification symbol means. If you do not know the appropriate classification symbol, you can browse the classification system to find suitable symbols for your search in a specific technical field.

When searching in the CPC, you can:

- find classification symbols with the aid of keywords.
- find the description for a classification symbol you already know.
- approach a required subject step by step.

The **Classification search** screen provides the following functions for navigating and searching:

1. **Search field** – enter keywords to find matching classifications or enter a classification symbol to view its definition
2. **Section navigation** – display the CPC index or go to one of the main sections
3. **Toolbar** – change the presentation style for the classification scheme
4. **Classifications** – click on the symbol or on the title of a classification to view its subdivisions
5. **Selected classifications** – collect classification symbols for your search by selecting the relevant check box in the classification tree
Changing the presentation style for Classification search

The toolbar in Classification search provides a set of toggle buttons for selecting which details are displayed and how the classification scheme is presented.

- When a button is clicked (i.e. the function is activated), it appears in an inset style and with white symbols on black background.
- Where buttons work as pairs, you can click on either of the buttons to toggle the function:
  - flip symbols (left or right)
  - toggle tree
  - toggle 2000 series

<table>
<thead>
<tr>
<th>Button(s)</th>
<th>Function</th>
<th>Effect on presentation</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Flip symbols icon" /></td>
<td>Flip symbols (left or right)</td>
<td>The classification symbols and check boxes appear in the left column (default) or in the right column.</td>
</tr>
<tr>
<td>Button(s)</td>
<td>Function</td>
<td>Effect on presentation</td>
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<tr>
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<tr>
<td></td>
<td>Toggle tree</td>
<td>The subdivisions of a classification are set out with a number of dots (default) or in a tree-like structure with connecting lines.</td>
</tr>
<tr>
<td></td>
<td>Toggle warnings and notes</td>
<td>The warnings list IPC classifications which are not covered by the selected CPC classification. The notes explain which technical subjects are covered by the selected classification and provide links to related classifications.</td>
</tr>
<tr>
<td></td>
<td>Toggle scheme colours (IPC versus CPC)</td>
<td>Classifications and texts that are part of the CPC and are not contained in the IPC are highlighted in green (in addition to being enclosed in curly brackets).</td>
</tr>
<tr>
<td></td>
<td>Toggle revision dates</td>
<td>The date of the last CPC revision is shown in square brackets following the classification title concerned.</td>
</tr>
<tr>
<td></td>
<td>Toggle references</td>
<td>References with links to related classifications are hidden. They can be displayed individually by clicking the (...) link.</td>
</tr>
<tr>
<td></td>
<td>Toggle 2000 series</td>
<td>The symbols of the CPC 2000 series classification are hidden or shown (default) in white characters on red background.</td>
</tr>
</tbody>
</table>

**Viewing classification details**

Starting from the subclass level, *Classification search* provides more functions for viewing and downloading additional information.

1. **[1]** Browse to the previous (parent or sibling) classification or to the next (sibling or child) classification by clicking on the pagination links.

2. **[2]** Display or download more information by clicking the relevant detail icon.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
<th>Effect on presentation or download</th>
</tr>
</thead>
<tbody>
<tr>
<td>📚</td>
<td>Download classification scheme</td>
<td>The schemes of the main sections (A to Y) and subclasses (e.g. A21B) can be downloaded as individual PDF files.</td>
</tr>
<tr>
<td>⚡</td>
<td>Toggle definition</td>
<td>The definition is set out with a light pink background. The definition statement describes which technical fields are covered by the selected classification level. Where available, the definition also contains reference information, sample images, a glossary of terms and other additional information.</td>
</tr>
<tr>
<td>Icon</td>
<td>Function</td>
<td>Effect on presentation or download</td>
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<tr>
<td>![Icon]</td>
<td>Toggle notes</td>
<td>The notes are set out with a light blue background. The notes define technical terms, explain which subjects are covered by the selected classification or provide links to related classifications.</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Toggle warnings</td>
<td>The warnings are set out with a light yellow background. The warnings list IPC classifications which are not covered by the selected CPC classification.</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Download definition</td>
<td>The definition of the selected subclass can be downloaded as a PDF file which includes the definitions for all groups and subgroups in that subclass.</td>
</tr>
</tbody>
</table>

**Cooperative Patent Classification**

<table>
<thead>
<tr>
<th>Classification and description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
<td>HUMAN NECESSITIES</td>
</tr>
</tbody>
</table>

**Personal or domestic articles**

- **A47**  Furniture (arrangements of seats for or adaptations of seats to vehicles; 8669); DOMESTIC ARTICLES OR APPLIANCES; COFFEE MILLS; SPACE MILLS; SUCTION CLEANERS IN GENERAL (ladders 5000);

- **A470**  HOUSEHOLD OR TABLE EQUIPMENT (bookends A47B 500 times B26B)

**Definitions**

- **A47** relates to household or hotel equipment.
  - Distinguished from kitchen equipment (A47F), shop equipment (A47G) and bathroom equipment (A47K).
  - Not including furniture (A47B), C) cleaning equipment (A47L) and
  - Not including equipment otherwise provided for e.g. heating/cooling equipment (F24A/F25); building equipment (E01); games (A63F); toys (A63H); electrical equipment for example lighting devices (F21V); electric heating equipment (F24D); musical instruments (G92) and radio/television/telephone sets (H04).

**Notes**

- This subclass covers equipment for similar use in hotels, dressing rooms, vehicles, or the like, not otherwise provided for.

**Warnings**

- The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

**Navigating through subclasses and displaying more information**
CPC definitions

CPC definitions describe the classification practice in each technical area down to at least the main group level, but in many cases even down to the subgroup level.

CPC definitions are made up of eight components (where available):

- title
- definition statement
- relationship between large subject-matter areas
- references relevant to classification
- informative references
- special rules of classification
- glossary of terms
- synonyms and keywords

CPC differences to the IPC

Curly brackets {...} either mark the title of a CPC group which does not exist in the IPC or they set out the CPC-specific text added to the original title of an IPC group. Curly brackets are currently not used in the CPC 2000 series and the Y section.

/ Click on the green CPC button to display the CPC-related text highlighted with a green background.
**CPC 2000 series**

Most applications are classified with a more general symbol and with several symbols specifying the technical details and providing additional information.

The CPC 2000 series symbols (formerly called CPC indexing codes) can only be used to classify and search additional information, similarly to the IPC indexing codes.

- Click on the red **2000** button to hide or show (default) the CPC 2000 series classifications.
- Select the main classification first, and then add CPC 2000 symbols for additional information.

![Cooperative Patent Classification](image)

2000 series classification symbols for additional information selected

**Finding classification symbols with keywords**

You can search for relevant CPC symbols by starting with a simple keyword query.

- The search for keywords scans the titles and abstracts of the patent documents, not the classification description.
- Enter your keywords in the search field.
- Click on **Search**.
The search result will display the groups and subgroups that have been assigned to patent documents in which your keywords are found. The more stars are displayed, the more frequently the search term occurs in the documents in this group. If a row features several stars, it will be worthwhile continuing to search in this direction.

In the example below, the keyword search for **tennis racket** shows that **A63B49** is likely to be relevant.

![Cooperative Patent Classification](image)

**Ranking of results for a keyword search in the CPC**

You should always explore the classification system in great detail before using a symbol for your search, as details of your search terms may only be specified further down in the classification tree.

- Click the symbol or the title to explore the subdivisions of that group.
- Repeat to view details of a particular subdivision.
- To make use of a classification symbol in your search later, select the check box next to a symbol.

The symbol is copied into the **Selected classifications** box on the left.

In the example below, your selection will search for documents that have been classified with **Tennis, badminton, or like rackets > Frames made of non-metallic materials, other than wood.**
Subgroup selected from a keyword search result list

Looking up information for classification symbols

If you are approaching your subject by searching with keywords in Advanced search or Smart search, you will note that there are some classification symbols that occur most frequently in your search results. You can look up these symbols in the CPC scheme to learn more about the technical field that they cover. This will help you find the right classification symbol(s) for your search.
Searching for a classification symbol

- You can only search for one classification symbol at a time. Operators and wildcards are not allowed. The symbol must be entered in the correct format for the classification level in question.

/ Click on Classification search in the navigation bar.
/ Enter the classification symbol in the search field.
/ Click on Search.

The classification scheme opens at the queried classification, displaying all sub-levels.

/ To view the definition of a classification, click the relevant icon.

Result from searching for a specific classification symbol in the CPC

Viewing details in the classification popup

The classification scheme is also accessible from the Result list screen and from the Bibliographical data screen.
To display the classification scheme for a specific symbol, click on the relevant CPC or IPC symbol.

If **Classification popup** is enabled in **Settings** (default), the classification popup opens.

The functions in the classification popup are similar to those in **Classification search**.

- Use the toolbar buttons to change the presentation.
- Use the icons to download a scheme, to display the definition or to display information or warnings.
- Click on a classification symbol to open the relevant description with more details in the **Classification search** screen.

Viewing the classification popup for a symbol in the Result list

- To see sample images from applications classified under this symbol, click the **Images** tab.
- Browse through the images using the right arrow icon (next) and left arrow icon (previous).
To find out more about the patent application from which the image has been taken, copy the publication number indicated below the figure and enter it in *Smart search* without the kind code.

Exploring the CPC step by step

One of the greatest challenges in searching for patent information is determining the relevant classification symbol. Often, the right classification category for an object is not immediately obvious.

The following example illustrates how you can drill down your classification search from a broad keyword search to the specific technical details you are interested in.

* Click on *Classification search* in the navigation bar.

* Enter your keywords and click on *Search*.

In this example, the four stars clearly indicate that the group *A47J31/00* is the best result. However, in most cases multiple classification symbols are assigned to an application. The precedence of classification symbols from other main sections suggests that specific technical features should also be considered.
Results for keyword search in Classification search

/ Click on the classification that best matches your intention.

/ Look for the appropriate subgroup at the highest level (i.e. the one marked with one dot) and click on that symbol.

The scheme is reduced to the selected subgroup.
Sub-elements of the selected subgroup

/ Look for technical details that further differentiate the subject-matter and click on the appropriate symbol (marked with two dots).

/ Where available and appropriate, reduce the scheme down to a sub-level marked with five (i.e. great-great-grandchildren) or even more dots.

Reducing the scheme to CPC-specific subgroups

At this point, you can decide on the level of detail at which you would like to proceed with your search. If you restrict your search to a classification symbol that is only covered by the CPC, you might narrow your search too much.

/ Click the CPC button to highlight the CPC-specific subdivisions.
In this example, the subgroups **A47J31/34** and **A47J31/36** cover both the IPC and the CPC.

- Select the classification symbol(s) you are interested in.

  The children classification symbols are also selected, which is indicated by the `/low` operator in the *Selected classifications* box.

---

**Using selected classification symbols for searching**

If your research in the CPC results in a set of classification symbols, you can immediately use these for searching for matching patent applications.

- Click on *Find patents* to search with the selected symbols.
- Click on *Copy to search form* to export the selected symbols to the *Advanced search* mask.

  "Add other search criteria in the appropriate search field to narrow down your search."
For the best search results, we recommend combining queries in the **CPC/IPC** fields with keyword fields. It is useful to check the classifications listed in your results again when you have finished searching. Sometimes classes appear which you did not take into account before.

- Check the number of results and page through the result list, paying particular attention to the titles of the documents found and to the classification symbols specified.
- Check to see whether one or other of the symbols or its parts predominates.

The example below shows that many of the inventions describe a specific component or function of an espresso machine, not the machine itself as a complete object.

**Results of a classification search in CPC and IPC fields**

![Result list](image)
Clearing selected classification symbols

By default, multiple classification symbols are connected with the **AND** operator. If your search does not return any results, you have probably used classification symbols that are mutually exclusive.

/ Click on the **x** icon to remove an individual symbol from the selection.
/ Alternatively, clear the check box of the relevant classification symbol in the classification tree.
/ Click on **Clear** to remove all symbols from the selection.

Clearing classification symbols from the selection

The symbol including its child classifications is cleared from the selection.

Classification symbol including child levels is cleared from the selection
Applying CPC search operators

The /low operator is always applied by default. This means that your search will include all entries hierarchically below the selected classification level and that the check boxes for all the child classifications are selected.

If you apply the /exact operator, however, the search will only look for the classification symbol exactly as you enter it and will not retrieve results for child classifications.

/ To change the operator for a selected symbol, click on /low.

/ In the balloon that appears, select /exact followed by the classification symbol.

Changing the CPC search operator from low to exact

The operator changes to /exact and the check boxes of the child classifications are cleared.

The sub-levels are excluded from the selection if the exact operator is applied for a classification symbol.
Viewing the search results

If your search is successful, a list with the titles that have been found is displayed. Your search terms are highlighted in yellow where they appear in the list.

The Result list tab is activated in the main navigation once you run the first search. If cookies are enabled and not deleted when the browser is closed, clicking the Result list tab will display the results of your most recent search when you last visited the Espacenet website.

1. The toolbar provides functions for selecting, exporting, downloading and printing search results. You can toggle the list mode between extended view (default, shows 25 items) and compact view (shows 50 items).

2. The grey box above the list displays a summary of your search: the number of documents found, the database searched and the query with your search terms.

3. The page navigation shows more page numbers dynamically while you browse from one page to the next.

4. The sort options are available only if your search returns fewer than 500 results. Otherwise, the results are sorted by the date of upload in the Espacenet database.

5. The title is displayed in English or in the original language if no English translation is available. If you click on the title, you will see all details of the relevant patent document.

6. The bibliographic data summary shows the most important application data. In extended view, these are title, inventor(s), applicant(s), CPC and IPC symbols, publication info (publication number and publication date) and priority date. In compact view, only the title and the publication info are displayed.

7. The star icon allows you to add a document to My patents list. If the star is coloured red, the document is already saved to My patents list.

8. Clicking on a CPC or IPC classification symbol will display the description of the relevant classification level within the CPC scheme in the classification popup.

9. Numbers in brackets – e.g. (+2) – under the inventor/applicant names or classification symbols indicate the number of additional names or symbols that you can see in the Bibliographic data screen for the document.

10. The grey box below the list features a Load more results for export button. Clicking on this will add the next 25 (extended view) or 50 (compact view) titles to the list.
Data and tools in the Result list

The result list is limited to 500 titles per search. Even if the number of matching results is higher, only the 500 most recent documents uploaded to the database can be displayed. This means that you have to enter additional search criteria to limit your search if you are interested in documents published earlier. The approximate number of search results is indicated in the result list.
Example of a search with more than 500 results

If more than 100,000 results are found, the search engine no longer calculates the number of results. The result list only indicates that there are more than 100,000 results.

Example of a search with more than 100,000 results
Modifying the search

You can modify your query if the search does not return the results you were expecting or if there are too many results or no results at all.

/ To narrow the search, add more search criteria, e.g. limit the search to a specific period of time by entering a publication date.

/ To broaden the search, change the search criteria, e.g. by adding more keywords connected with the OR operator.

/ To exclude unwanted results, use the NOT operator or enter different search criteria.

Refine search

If you want to work with the query that you entered most recently, you can go back to the Smart search or Advanced search screen and modify your search terms.

/ Click the Refine search link in the breadcrumb navigation.

The Refine search link is available in both the Result list screen and the document screens.

You are returned to the same search screen that you used to find these results, including the search terms that you entered.

Depending on what you want to do, you can now:
• select a different database
• add one or more keywords
• delete keywords
• extend your search with wildcards
• fill in additional search fields (when using Advanced search)
• use additional field identifiers (when using Smart search)

Clear search
Especially when using **Advanced search**, you can easily overlook an entry in one of the fields and you might wonder why your search does not return any results. It is therefore a good idea to clear all search fields in one go before entering new search terms.

Click the **Clear** link, which is located to the left of the **Search** button at the bottom of the search screen.

This deletes all search terms in the current screen (e.g. **Advanced search**). The search terms or selections in the other search screens (e.g. **Smart search** and **Classification search**) are retained until you clear them or close the browser window.

*Clearing the search fields in the Advanced search screen*
Browsing the result list

By default, the result list displays 25 results per page in extended view.

- To display 50 results per page, switch to compact view by clicking Compact in the toolbar.
- The bibliographic summary is reduced to the publication info.
- To switch back to extended view, click Extended in the toolbar.
- To view the next page of results, click the little black arrow icon in the page navigation.

The page navigation is located in both grey boxes above and below the result list.

Browsing to the next page of results in compact view

Paging in search results

When processing a search request, Espacenet retrieves a list of results that are considered hits. Since this list can consist of up to 100,000 entries, it is not feasible to fetch all resulting entries from the database. Instead, Espacenet not only limits the number of results displayed to the 500 documents updated most recently, it also serves you with only 25 results at a time. It splits up the result list into pages, allowing you to browse through the pages one by one, using the page navigation.
When the **Result list** is displayed after a search, the page navigation initially only displays the number 1 for the current page and the black arrow icon that serves as a link to the next page.

This apparent lack of paging controls is due to the fact that Espacenet has to inspect each page of results to perform deduplication, i.e. to weed out duplicates from the result list and group equivalent items together. Thus, Espacenet only provides direct links to pages it has already inspected.

Every time you click the arrow icon to go to the next page, the previously visited page number is added to the page navigation and serves as a link to that page. On page 2 and the following pages, there is also a black arrow icon to the left that serves as a link to the previous page.

To go to one of the previously visited pages, click on the black arrow icon to the left or click on the relevant page number.

While you browse forwards through the result list, deduplication reduces the number of search results page by page.

If there are 500 search results or less and the last page has been reached, the word **Approximately** is no longer displayed, because this screen now shows the final number of hits.

The page navigation features the paging slider once the final number of hits has been calculated. By dragging the slider indicator you can access the page numbers that are currently not shown.

---

**Dragging**: Clicking on the slider indicator and moving the mouse while holding down the mouse button.
To go to a specific page, drag the slider indicator to the new position.

The hidden page numbers are displayed while you drag the slider indicator along.

Release the mouse button to go to the selected page number.

If there are more than 500 results and the last page has been reached, there will be no further extension of the page navigation.

You can sort the result list by upload date, priority date, inventor, applicant or CPC in ascending or descending order. The default is sorting by upload date in descending order, i.e. the most recent publications come first.

The upload date is the date the documents were included in the Espacenet database, which is not necessarily the same as their publication date.
The sorting options are only displayed if the number of search results is less than or equal to 500.

- Change the sort key by selecting an option from the **Sort by** list.
- If appropriate, change the sort order from descending to ascending or vice versa.
- Click on **Sort**.
  - The list will be re-sorted.

### Changing the sort key and the sort order

### Loading more results into the list

You can display more than 25 (50 in compact view) titles in the **Result list** screen by loading more results. This is especially useful if you want to print or export your complete result list or download the covers. The maximum number of results that can be loaded is 500.

- To start loading more results, go to page 1 of the search results.
- Click on **Load more results for export** at the bottom of the list.

### Adding the next set of results to the list on display
The next 25 (extended view) or 50 (compact view) results are appended to the list. Note that the titles are no longer active links and that the page navigation is not available.

When the end of the result list has been reached, the **Load more results for export** button is replaced by the words **End of data**.

To return to page 1 with page navigation and active title links, click on **Reset search result**.

---

**Printing the search results**

You can print the result list either page by page or as the complete list when you have reached the end of the result list by loading more search results.

To print all the results you are currently viewing, click on the **Print** icon in the toolbar or press **CTRL+P**.

The list is printed to your default printer in the same layout as you see on the screen.
### Result list

Approximately 223 results found in the Worldwide database for: (txt = espresso and txt = machine) and num = IT using Smart search

| 1. DEVICE FOR IDENTIFICATION OF A FILTER HOLDER OF AN ESPRESSO COFFEE MACHINE |

| 2. Super-automatic coffee maker for preparation of espresso coffee |

| 3. Machine for preparing beverages |

*Result list as it appears in print*
Exporting search results to CSV or XLS

The export function allows you to save the current result list to a CSV file (default) or to an XLS file. CSV (character-separated values) files are text-only data and can be used for further processing, while the XLS format is best opened and edited in Microsoft Excel.

The following columns are exported:

- Title
- Publication number
- Publication date
- Inventor(s)
- Applicant(s)
- International classification (IPC)
- Cooperative Patent Classification (CPC)
- Application number
- Date of application
- Priority number(s)
- Patents cited in the search report
- Literature cited in the search report
- Patents cited during examination
- Literature cited during examination
- Other patent citations
- Other literature citations
- Patents used in opposition
- Literature used in opposition
- Patents cited by the applicant
- Literature cited by the applicant
- International search citation
- International search NPL citation
- Supplementary international search citation
- Supplementary international search NPL citation

You can export the result list either page by page or when you have retrieved the complete list by loading more search results.
To export the list in CSV format, click on **Export** or on the **CSV** link in the toolbar.

To export the list in XLS format, click on the **XLS** link in the toolbar.

Choose where to save the file.

Enter a distinctive file name by changing the default name (which is **result.csv** or **result.xls**).

This is what the exported list looks like when opened in MS Excel.

Below the EPO logo you will find a summary of your search query. The underlined publication numbers in the spreadsheet have active hyperlinks to Espacenet.

Click on the publication number of a document to open it online in Espacenet.

```
<table>
<thead>
<tr>
<th>Publication number</th>
<th>Publication date</th>
<th>Inventor(s)</th>
<th>Applicant(s)</th>
<th>International classification(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12345</td>
<td>2015-03-01</td>
<td>Battat Ltd</td>
<td>ABC Corp.</td>
<td>A01H01,F02G03</td>
</tr>
<tr>
<td>67890</td>
<td>2015-03-02</td>
<td>Battat Ltd</td>
<td>ABC Corp.</td>
<td>A01H01,F02G03</td>
</tr>
<tr>
<td>12345</td>
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<td>Battat Ltd</td>
<td>ABC Corp.</td>
<td>A01H01,F02G03</td>
</tr>
</tbody>
</table>
```

**Exported XLS file with hyperlinks to Espacenet**

If you are interested in the EPO's annual reports and statistics on European patent applications, visit the EPO website and go to **About us > Annual reports and statistics**.

Downloading cover sheets

In addition to exporting and printing your search results, you can also download the covers (the first pages of the patent documents found) as a PDF file. You can select individual covers or download all covers of the list currently on display. The maximum number of covers that can be downloaded is 500.

- If you want to download documents, your browser must be configured to allow cookies from the Espacenet website.

To download individual covers, select the relevant check boxes to the left of the titles.

To download all available covers, first append all search results to the result list by clicking on Load more results for export repeatedly.

Click on Download covers in the toolbar.

The Espacenet verification window opens and shows a captcha image with a security code. You can see in the background that all check boxes have been automatically selected.

Enter the digits shown in the captcha image in the field below.

Click on Submit.

Wait for the download to start.
Depending on the number of covers, this may take a few minutes.

At the browser prompt, choose whether to open or save the PDF file.

To close the verification window and return to the Result list, click either on the Close this window link or anywhere in the greyed area outside the window.

The downloaded PDF file contains a cover sheet with the list of included titles and a bookmark for each application cover page.
Subscribing to RSS feeds

An interesting option to follow up your search results is to subscribe to an RSS feed. Microsoft Internet Explorer, for example, has a built-in RSS reader to manage your feeds. If new applications matching your search query are published in Espacenet, you will see them in your RSS feed.

/ Click the orange **RSS** icon to the right of the **Result list** heading.

**RSS icon in the search results**

/ The search results are displayed as an RSS page.

/ Click **Subscribe to this feed** in the yellow box on the top of the list.

**Viewing the search results as an RSS feed**

/ Enter a name for your feed and click **Subscribe**.

/ The RSS feed is saved to your feed list.
Subscribing to new RSS feed

Espacenet allows you to save the first 100 entries of a search result list to a new RSS feed. New entries will be added to the beginning of the feed. The corresponding number of entries at the end of the feed will be deleted if the maximum number of 100 is exceeded. In Microsoft Internet Explorer, however, the maximum number of entries in an RSS feed is 2,500.

To view your feeds later, click the Favourites icon in the toolbar and select the Feeds tab.

If there are new files matching the search query, their number will be displayed as New.

Viewing RSS feeds in Internet Explorer
My patents list
Espacenet allows you to maintain a personal list of favourite patent documents in My patents list. You can save up to 100 documents in My patents list, and from it you can download selected documents or export the list for further study. My patents list expires if you do not access it for over a year.

Cookies and local data storage
My patents list stores your entries in a local browser cookie – which means that a specific My patents list can only be viewed when you are logged into the same user account on the same computer and are working with the same browser that you were using when creating the list.

My patents list does not work if your browser does not allow cookies for the Espacenet website. The data that you saved in My patents list can be accessed until the cookie expires after one year and as long as the cookie is not deleted.

Viewing My patents list
The number indicated on the My patents list tab indicates how many documents you have already added to the list.

/  Click on the My patents list tab to view your personal list.

My patents list with selected titles
The features of *My patents list* are similar to those of the *Result list* screen:

[1] The toolbar provides functions for managing the list: selecting, exporting and removing items, downloading selected documents, printing.

[2] You can toggle the list mode between extended view (default, shows 25 items) and compact view (shows 50 items).

[3] The page navigation provides page numbers and arrow icons to browse the list.

[4] You can change the sort order.

**Adding documents to My patents list**

Patent documents can be added to *My patents list* from the *Result list* screen or when you are viewing an individual application.

/ In the *Result list* screen, click on the black star icon to the left of the bibliographic data.

/ The star icon turns red, indicating that this patent document has been added to *My patents list*.

Adding a document to My patent list from the search result list

/ In the document you are viewing, click on *In my patents list* in the toolbar.

/ The star icon to the left of *In my patents list* turns red.
Removing documents from My patents list

When you are viewing search results or an individual application, you can tell by the red star icon that a patent document has been added to My patents list.

- To remove an individual document from My patents list, click on the red star icon in the Result list screen or click on In my patents list in the document screen toolbar.
  - The star icon turns black, indicating that this document is now no longer in My patents list.
- To remove multiple documents from the list, go to My patents list.
- Select the check boxes of all documents that you wish to remove from the list.
- Click on Remove selected in the toolbar.
  - The selected documents are removed from the list and the number of saved items in the My patents list tab is updated.
Downloading documents from My patents list

You can download the complete set of original documents, i.e. abstract/bibliography, description, claims, drawings and search report (where available), for selected patent documents from My patents list. These documents will be bundled into one PDF file up to a maximum of 500 pages. This means that you have to start several downloads if you want more than 500 pages.

- If you want to download documents, your browser must be configured to allow cookies from the Espacenet website.

/ Go to My patents list.
/ To view all your list entries (the maximum number is 100), click on the Load more results for export button until you reach the end of the list.
/ Select the check boxes for the relevant documents.
/ Click on Download in the toolbar.

The Espacenet verification window opens and shows a captcha image with a security code.
/ Enter the digits shown in the captcha image in the field below.
/ Click on Submit.
/ Wait for the download to start.

- Depending on the total number of document pages, it may take a few minutes until the browser prompt appears. If you click on Submit again before the file is ready for download, a message appears indicating that Espacenet takes your action as a sign of your being a search robot.
Entering the security code from the captcha image to download documents

> At the browser prompt, select whether to open or to save the PDF file.

> To close the verification window and return to My patents list, click either on Close this window or anywhere in the greyed area outside the window.

The downloaded PDF file contains a cover sheet with the list of included titles and has bookmarks for each publication number and patent document component.
If your download file would contain more than 500 pages, a window displaying a message to that effect will open.

/ Close the window and clear an appropriate number of check boxes to proceed.

Too many documents selected for download, thus exceeding 500 pages

**Sorting My patents list**

[same as in Result list]

**Exporting My patents list to CSV or XLS**

[same as in Result list]

**Printing My patents list**

[same as in Result list]
Using the query history

If *Query history* is enabled in the Espacenet settings, you can retrieve a saved query to view the results or to use it as a starting point for a new search. The number of query history entries to be saved can be set to 10 (default), 20 or 50.

- The query history is not enabled by default; this can be done under *Settings*. To enable you to personalise the Espacenet settings and use the query history, your browser must allow cookies from the Espacenet website.

  / Go to *Query history*.
  / Click on the query you want to use.
  / The search screen you were using for that query is displayed and the fields are populated with your search terms.

Selecting an entry from the query history

The features in the *Query history* screen are similar to those in *My patents list*:

1. The toolbar provides functions for managing the list: selecting, exporting and removing items, printing.
2. You can toggle the list mode between extended view (default, shows 25 items) and compact view (shows 50 items).
3. The page navigation provides page numbers and arrow icons to browse the list.
Viewing patent documents

When you open a patent application you are interested in, you will see that the user interface consists of five to six areas:

1. Main navigation
2. Navigation bar
3. Quick help
4. Toolbar
5. Data section
6. Text section with Patent Translate feature

Overview of a patent application in the Bibliographic data screen
Navigating through the document

You can use the navigation bar [2] to access further information about the patent document you are viewing, e.g. to inspect the original documents.

/ Click an item in the navigation bar to view more details in the corresponding screen.

As not all of the information may be available for every document, some items in the navigation may be disabled. For example, the bibliographic data may be available for a specific document, but there may be no cited documents. In this case, the Cited documents item is greyed out and cannot be clicked.

Adobe Reader 7 or higher must be installed on your computer to display the documents in the PDF viewer in the Mosaics and Original document screen.

Bibliographic data
Contains all the important information about a patent document, where available: title, inventor(s) and applicant(s), classifications (IPC and CPC), application number and date, priority number(s) and date(s), "also published as" documents, the abstract and a drawing.

Description
Contains the description of an application as searchable text in English. Where the original description is not available in English, the description of a corresponding document is displayed. Links to the patent family members lead to the corresponding original documents in other languages. Translation into more languages is possible with Patent Translate.

Claims
Contains the claims of an application as searchable text in English. Where the original claims are not available in English, the claims of the corresponding document are displayed. Links to the patent family members lead to the corresponding original documents in other languages. Translation into more languages is possible with Patent Translate. The claims tree displays the claims text in a tree-like structure that can be expanded and collapsed, supported by an interactive tree diagram.

Mosaics
Displays all drawings of an application (where available) as miniature figures in the PDF viewer. The PDF files can be printed and downloaded.
**Original document** Displays the original patent application (where available) in the PDF viewer. If the original document cannot be retrieved, a corresponding document is displayed. The PDF files can be printed and downloaded.

**Cited documents** Lists documents (patent documents and non-patent literature) cited by the patent office or by the applicant, describing the known inventions closest to the one in the application.

**Citing documents** Lists other patent documents in which this document has been cited (where available).

**INPADOC legal status** Contains legal status data relating to events in the lifetime of a patent document (where available in Espacenet).

**INPADOC patent family** Lists all of the patent family members linked to this document by at least one priority.

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**Using toolbar functions**

The toolbar [4] provides some extra functions for working with the currently opened document. Depending on the screen you are viewing, there are different options. In the listing screens, i.e. Cited documents, Citing documents, INPADOC patent family, the functions are similar to those in the Result list screen.

![Toolbar in the Bibliographic data screen](image)

**Toolbar in the Bibliographic data screen if opened from the Result list**

![Toolbar in the Bibliographic data screen if opened from My patents list](image)

**Toolbar in the INPADOC patent family screen**

**In my patents list** Add the document to My patents list (cookies must be enabled)

**EP Register** Open the document in the European Patent Register

**CC Register** Open the document in the national patent register (CC stands for the country code, e.g. IT or GB)
Global Dossier
Open the document in Global Dossier
(provided by the EPO and the co-operating offices)

Previous
Go to the previous document in Result list/My patents list
(available when the document was opened from the Result list/My patents list screen)

Next
Go to the next document in Result list/My patents list
(available when the document was opened from the Result list/My patents list screen)

Report data error
Open the general EPO contact form
(pre-filled with core data)

Select all
Select the check boxes for all items in the list for download or export

Compact
Change the list view from extended (default, shows 25 items) to compact (shows 50 items)

Export (CSV/XLS)
Export the core data of the selected list items to a CSV or XLS file

Download covers
Download a PDF file containing the first page of the original document for each of the selected list items

CCD
Open the Common Citation Document (CCD viewer) with citation details from international search reports and classifications (only in Cited documents and INPADOC family screen and where applicable)

Print
Print the contents of the current screen

Links to other patent documents
Links to other documents in Espacenet are underlined. The corresponding documents in the Also published as section are marked with document icons or arrows, depending on the availability of data.

/ Click on the link to open the relevant document.

IT201301791201301028
Opens the priority document in the Bibliographic data screen

D US2015114234 (A1)
Opens the document in the Original document screen

KR2015004659 (A)
Opens the document in the Bibliographic data screen
(no original document available)
To go back to your starting point or one of the intermediate steps, use the links in the breadcrumb navigation located below the main navigation bar.

The breadcrumb navigation provides links to previously visited documents or pages.

If you have opened the document you are currently viewing from the Result list or the My patents list screen, you can browse to the previous or next document directly, without having to return to the list first.

To go to the previous or next document in the search result list, click on Previous or Next in the toolbar.

The paging function provides links to the previous and next document in a result list.

Viewing a document in other patent registers

For EP publications and documents from a number of other national offices, a direct link to the European Patent Register or to the relevant national patent register is provided in the toolbar. This allows you to directly consult up-to-date legal status information for the application concerned.

Click on the link in the toolbar to view the document in the relevant patent register.

Link to a patent document in a national patent register, in this case Italy

The data on this patent document is displayed in the selected register.
Example of patent application data on the website of the Italian Patent Office

**Viewing a patent document in Global Dossier**

Global Dossier gives you access to the "file inspection" or "file wrapper" content published by the

- IP5 offices (the EPO, the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People’s Republic of China (SIPO) and the United States Patent and Trademark Office (USPTO))
- Canadian Intellectual Property Office (CIPO)
- World Intellectual Property Organization (WIPO)

If the patent document you are viewing is published by one of these patent offices, the *Global Dossier* link with the red icon appears next to the patent application number in the *Bibliographic data* and *INPADOC patent family* panels.

/ Click on the *Global Dossier* link.
The EPO Global Dossier opens in a new browser window (or tab).

The partner office and the assigned application number appear at the top.

To display the original document in the original language, click on a description marked (ORIGINAL).

To display the (machine-)translation into English, click on a description marked (TRANSLATED).

The document opens in the PDF viewer. You can have both the (ORIGINAL) and (TRANSLATED) windows open simultaneously.
Translating text with Patent Translate

The **Patent Translate** feature provides machine translations of abstracts, claims and descriptions from English to other languages and vice versa.

**Patent Translate** is a machine translation service specifically "trained" to handle elaborate patent vocabulary and grammar. It takes a statistical approach, comparing the source document sentence by sentence with millions of patent documents previously translated by human translators.


- Please note that the engine cannot provide legally binding translations. The machine translation should give you the gist of any patent or patent-related document and help you to determine whether it is relevant.

If you want to read the text of abstracts, descriptions and claims in another language, you can either follow the links to the original documents of the patent family members or use the **Patent Translate** feature.

- To have the abstract translated, select the target language from the drop-down list.
- Click on the red **patenttranslate** button.
- Patent Translate opens in a new browser window (or tab).
Selecting the target language for Patent Translate

/ To compare the translated text with the English original, move your mouse cursor over a text paragraph.

/ To have the text translated into another language, click on the target language in the list on the left.

/ To print the contents of the screen or to download the translation/the original and translation as a PDF file, click on the relevant link on the top right.
Features of Patent Translate

Contributing to Patent Translate

The EPO welcomes your feedback on machine translations and invites you to contribute by means of one of the interactive features of Patent Translate.

- You can submit your opinion by selecting one of the rating options in the grey box to the right.

- You can help the EPO improve translation quality by submitting your corrected translation for a complete paragraph or for individual words.

To submit a correction, click on the relevant text paragraph.

The paragraph is highlighted in grey and two buttons appear on the left above the text.

Click on Submit Corrections.
Options for submitting your opinion or an improved translation to the EPO

The correction editor opens in an overlay window.

// Select the text to be corrected and enter your improved translation.
// Then click **Submit**.
Bibliographic data

The bibliographic data of a document comprises the core data of the patent application.

The main header in the Bibliographic data screen shows the publication number with the kind code in brackets, followed by the publication date (yyyy-mm-dd).

The data sections in the Bibliographic data screen are:

**Title**
Short English text describing the content of the application. If the document was originally published in another language, the title may be a translation into English. Where the EPO has not translated the title into English, the document is shown with its original title.

**Page bookmark**
Right-click on the bookmark link and select Add to favorites (Internet Explorer) or Bookmark this link (Mozilla Firefox).

**Inventor(s)**
Standardised inventor name(s), where available in Latin characters. Click on the + sign next to the name(s) to see the unstandardised name(s).

**Applicant(s)**
Standardised applicant name(s), where available in Latin characters. Click on the + sign next to the name(s) to see the unstandardised name(s).

**Classification**
International Patent Classification (IPC) and/or Cooperative Patent Classification (CPC)

**Application number**
Application number followed by the filing date (yyymmmdd)

**Priority number(s)**
Priority number followed by the priority date (yyymmmdd). Where available, the number is a link to the relevant Bibliographic data screen or to a result list if more than one result with this number exists.

**Also published as**
Documents of the same patent family, i.e. patent documents with the same priorities (usually applications for the same invention filed with other patent offices). The publication numbers link to the relevant Original document or Bibliographic data screen.

**Abstract**
Contains a concise summary of the disclosure of the invention as contained in the description, claims and drawings.

Not every document has an abstract in English. If the document is published in another language, Espacenet takes an abstract from a corresponding document of the same simple patent family, where available.
The EPO relies on data delivery from more than 90 patent-granting authorities and cannot guarantee that the data on Espacenet is complete.

**Corresponding documents**

A single invention can be the subject of a patent application in many different countries. In Espacenet, these related applications are known as corresponding documents (or "equivalents") and you will find them in the **Also published as** section.

**Also published as** documents all have exactly the same priority. When you open any one of them, you can view a facsimile of the original document, allowing you to read the document in another language (where available). The content of the corresponding document is very similar, if not identical, to that of the document you retrieved in your search.

- Click on the publication number link to open the relevant document in the **Original document** screen.

  If the corresponding document does not contain a facsimile, the relevant link is marked with an arrow icon and opens the document in the **Bibliographic data** screen.

If all the publication numbers do not fit into one line, a **more** link is displayed at the end of the line.

- Click on **more** to see all the corresponding documents.

More corresponding documents are available

- The **Also published as** section is expanded.

- Click on **less** to collapse the list to the first line.

All corresponding documents are displayed
Abstract

English-language abstracts are available for all patent applications from the PCT minimum documentation and their corresponding documents dating from 1970 onwards, and in some cases even earlier than that.

Corresponding patent documents are members of a patent family.

In the past ESPACENET would retrieve an English abstract for the bibliographic data. With the implementation of Patent Translate, ESPACENET retrieves the abstract in all languages.

If you want to view an original English abstract, check in the Also published as section.

Example of a priority document where the abstract of the corresponding document is displayed

- The abstract may also be an English translation of the abstract of a published document not originally in English. In some cases the EPO has not translated the abstract into English.

Granted patents

To view the bibliographic data of the granted patent (where available), click on the original B document in the Also published as section.

Link to the B document of a patent family
The document is displayed in the **Original document** screen.

/ Click on **Bibliographic data** in the navigation bar.

### Non-patent literature

The bibliographic data of a non-patent literature (XP) document shows the NPL reference number, the publication date, a classification (CPC) symbol (where applicable), the URL of the citation (where available), a digital object identifier (DOI) and an external disclaimer.

/ To view the original document as an online publication, click the relevant DOI link (where available).

Most scientific online publications are accessible only to registered users and paying subscribers.

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#### Bibliographic data of a non-patent literature document with DOI link

- In Espacenet, the bibliographic data of non-patent literature documents is displayed only if they have been classified using the Cooperative Patent Classification system (CPC) or if they have been cited in a search report produced by the EPO.
Description

The description part of a patent document informs you of the area of technology to which the invention relates and the advantages the invention offers. The text contains a description of at least one way of implementing the invention claimed and an explanation of its commercial use.

The description contains the following components:

- an indication of the technical field to which the invention relates
- a summary of the background prior art useful in order to understand the invention
- a disclosure of the invention as claimed, describing the technical problem and its solution and stating the advantageous effects of the invention with regard to the background art
- a brief description of the figures in any drawings, indicating their numbers
- a detailed account of at least one way of carrying out the claimed invention
- a statement of how the invention is capable of industrial application.

If you want to find keywords in the description text of the document that you are currently viewing, you can use your browser's search function.

Viewing the original description

The text shown in the description is usually that of the A document, even if the document you are viewing is the B document.

To view the description of the B document, go to the Original document screen.
In the PDF viewer, browse to the Description pages.

Viewing the description of the B document in the Original document screen

Viewing the description in other languages

The Description screen contains links to the original documents of the patent family members in other languages, where available.

To open the description of the related document, click on the publication number.
Links to the Original document screen of family members in other languages

The **Original document** screen appears and displays the description in facsimile format in the PDF viewer.

Viewing the description as original facsimile document in the language used for filing

Alternatively, you can use the **Patent Translate** feature.

- To have the description translated, select the target language from the drop-down list.
- Click on the red **patenttranslate** button.
Claims

[most of the text is the same as in "Description", only the terms have been replaced]

The claims are the part of the patent document that defines the scope of the legal protection sought for the invention. The description and drawings are used to interpret the claims.

The three main claim types are:

- **process claim** – claim relating to a new process.
- **product claim** – claim relating to a specific new product.
- **product-by-process claim** – claim relating to a specific new product which is defined in terms of the way it is produced.

If you want to find keywords in the claims text of the document that you are currently viewing, you can use your browser’s search function.

Viewing the original claims

The text shown in the claims is usually that of the A document, even if the document you are viewing is the B document.

To view the claims of the B document, go to the *Original document* screen.

*B document displaying the claims of the A document*
In the PDF viewer, browse to the **Claims** pages.

Viewing the claims of the B document in the Original document screen

Viewing the claims in other languages

The **Claims** screen contains links to the original documents of the patent family members in other languages, where available.

To open the claims of the related document, click on the publication number.

Links to the Original document screen of family members in other languages

The **Original document** screen appears and displays the claims in facsimile format in the PDF viewer.
Viewing the claims as original facsimile document in the language used for filing

Alternatively, you can use the **Patent Translate** feature.

/ To have the claims translated, select the target language from the drop-down list.

/ Click on the red **patenttranslate** button.

**Viewing claim interdependencies in the claims tree**

Independent claims contain the main features of the invention. Most independent claims consist of two parts: the prior art portion and the characterising portion. Any independent claim can be followed by one or more dependent claims relating to particular aspects of the invention.

/ Click on the **Claims tree** tab to view a tree representation of the independent claims and their dependent claims.

/ Click on the + (plus) sign next to the claim number to expand the claims view and see how the dependent claims are hierarchically related.

/ Click on the - (minus) sign to collapse the claims view.
Expanding the claims tree

The claims tree diagram is a graphical representation of the hierarchical structure of the claims.

Click on a claim number to display the corresponding text.

- The claim's text is both displayed below the diagram and highlighted in brown within the numbered text sequence.
- In the diagram, the claim is highlighted in brown and its parent claim is highlighted in red.
Clicking a claim number in the diagram highlights and displays the corresponding text.

In exceptional cases the viewer may not be able to display the claims tree correctly. This can happen when an excessive number of claims is involved or claim dependencies are not drafted in the conventional way.
Mosaics

Drawings illustrate the technical details of the invention. The drawings in a patent document usually contain reference numbers or characters which are repeated in the description to explain the invention's embodiments in detail.

*Mosaics* is a collection of thumbnails (previews) of the drawings in a document. These are considerably smaller than the original drawings and so are faster to load. They offer you a quick overview of all the drawings belonging to a patent document. Up to six drawings are displayed on one page.

/ To view more mosaic pages, use the page navigation in the PDF viewer.
/ To save the mosaics, click on *Download* and follow the instructions.

![Thumbnail drawings in the mosaics](image)

/ To view the drawings in their original size, go to the *Original document* screen.
/ Click on *Maximise* and navigate to the drawing you are interested in.

Adobe Reader 7 or higher must be installed on your computer to display the documents in the PDF viewer in the *Mosaics* and *Original document* screens.
Original document

A fully-fledged patent document in Espacenet contains facsimiles of the complete original application, i.e. the request form with the abstract, description, claims, drawings and, where available, search reports. The original documents are available in PDF format and can be viewed, printed and downloaded.

Although the Espacenet database is continually being expanded to include additional countries and to provide more extensive coverage, the data is not complete for all documents. For example, the bibliographic data for a particular document may be available, but not the original documents. If this is the case, the Original document tab in the navigation bar is disabled.

Where corresponding documents are available, however, these may provide the original documents in English or in the language used for filing.

Adobe Reader 7 or higher must be installed on your computer to display the documents in the PDF viewer in the Mosaics and Original document screens.

Browsing the original documents

When you click on the Original document tab, the first page of the patent document opens in the PDF viewer.

The grey PDF viewer toolbar features the page navigation, the Maximise button and the Download button.

/ To go to a specific page in the document, select the page number from the dropdown list.

The main parts of the patent document are indicated with their corresponding page numbers.

/ To go to the previous/next page, click the little arrow pointing to the left or right.

/ To go to the first/last page, click the or the icon.
Espacenet's PDF viewer uses the browser's Adobe Reader plug-in, which may provide extra functions depending on the browser you are using.

The Mozilla Firefox Adobe Reader plug-in, for example, integrates an extra toolbar with functions for viewing, zooming, printing and downloading.

Viewing maximised documents

When you view documents in the **Original document** screen, the display size of the individual facsimile pages is relatively small, which makes the text hard to read.

/ To expand the display frame for PDF documents, click on **Maximise** in the PDF viewer toolbar.
   > The PDF viewer opens in a new browser window, providing the same page navigation as in the default view.
/ To print the page you are currently viewing, click on **Print**.
/ To quit the maximised view, click on **Return to espacenet**.
   > This closes the browser window.
## EP 2 965 362 A1

### Documents Considered to be Relevant

<table>
<thead>
<tr>
<th>Document</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>WO 0 384 546 A1 (LLEVEN JEAN PIERRE)</td>
</tr>
<tr>
<td>A2</td>
<td>EP 2 965 363 A1 (LLEVEN JEAN PIERRE)</td>
</tr>
<tr>
<td>A3</td>
<td>LEE 2011/09623, (BRIAND ARE STRAUF) ET AL. (June 2011)</td>
</tr>
</tbody>
</table>

### References

- A1: WO 0 384 546 A1
- A2: EP 2 965 363 A1
- A3: LEE 2011/09623
Downloading original documents

Espacenet allows you to download patent documents with up to 500 pages as one single PDF file. Alternatively, all EP and Euro-PCT documents (published applications and granted patents) can be downloaded from the European publication server, even if their size exceeds 500 pages.

- If you want to download documents, your browser must be configured to allow cookies from the Espacenet website.

Patent documents can be downloaded from the Original document screen; drawing thumbnails can be downloaded from the Mosaics screen.

- To download all the pages of the document you are currently viewing, click on Download in the PDF viewer toolbar.

- The Espacenet verification window opens and shows a captcha image with a security code.

- Enter the digits shown in the captcha image in the field below.

- Click on Submit.

- Wait for the download to start.

- Depending on the total number of document pages, it may take a few minutes for the browser prompt to appear. If you click on Submit again before the file is ready for download, a message appears indicating that Espacenet takes your action as a sign of your being a search robot. You will be presented with a new security code to enter.

Entering the security code from the captcha image to download the original document
At the browser prompt, select whether to open or save the PDF file. The PDF file name will be the same as the publication number.

To close the verification window, click either on **Close this window** or anywhere in the greyed area outside the window.

The downloaded PDF file contains all the pages of the patent document and has bookmarks for each component.

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**Downloaded patent document opened in Adobe Reader**

If your download file would contain more than 500 pages, a window displaying a message to that effect will open.

- Try to download the document from the European publication server or the relevant national patent register.
- Browse through the document and print out individual pages one by one.
Printing original documents

Espacenet offers various options for printing patent documents. You can print individual pages from the Original document screen or you can first download the complete document as a PDF file and then print all or selected pages using Adobe Reader.

Printing individual pages

If you are viewing a document in the PDF viewer within the Original document screen, you can only print the page that is currently displayed.

Printing options depend on the browser you are using. If you are using Mozilla Firefox, please refer to the extra instructions.

To print the current page from the Original document screen, click on Print in the Espacenet toolbar.

This will print only the document, not the other parts of the Espacenet screen.

Printing the current page of the original document

To print the current page in the maximised view, click on Print in the grey PDF viewer toolbar.
Printing in Mozilla Firefox

The Mozilla Firefox Adobe Reader plug-in integrates an extra toolbar with functions for viewing, zooming, printing and downloading. This toolbar is available in both the default view and the maximised view.

To print the current page from the PDF viewer, click on the printer icon in the dark grey PDF toolbar.

Printing the current page using the print function of the Adobe PDF plug-in in Mozilla Firefox
Printing complete documents

If you want to print a complete patent document, you must download it first from the *Original document* screen.

- Open the downloaded PDF file.
- Print all pages or selected pages using the print function in Adobe Reader.
Cited documents

Cited documents are documents cited during any of the procedures before a patent granting authority (search, examination, opposition, limitation, revocation or appeal) or cited by the applicant.

A cited document can be a patent document or an item of non-patent literature.

Espacenet displays all the cited documents available in the databases, regardless of their country of origin. To view the list of cited documents, click on *Cited documents* in the navigation bar.

As in the *Result list* screen, the toolbar provides functions for viewing, exporting, downloading and printing data.

The list of cited documents is grouped by origin (international search, search report, examination, opposition, other, applicant) and type (patent and non-patent literature).
Cited documents grouped by categories in compact view

Cited document categories:

- international search citation
- international search NPL citation
- patents cited in the search report
- literature cited in the search report
- patents cited during examination
- other literature citations
- other patent citations
- patents cited by the applicant
- patents cited during opposition
Citing documents

Citing documents are patent documents that have cited the document you are currently viewing. They can be patent applications or patents. Many documents do not contain any links to citing documents, which is due to the fact that they have not been cited in a search report.

To view the list of citing documents, click on Citing documents in the navigation bar.

As in the Result list screen, the toolbar provides functions for viewing, exporting, downloading and printing data.

Documents citing an EP patent document

Where the citing document is an item of non-patent literature, you can follow the link to its bibliographic data to find more information. Other patent documents citing the same literature might be of interest for your research.
Documents citing a non-patent literature publication
INPADOC legal status

The legal status of a patent or patent application refers to the entries made or procedural steps taken during the patent-granting process and the term of the patent. Espacenet retrieves the legal status data from the EPO’s INPADOC database, giving you a good indication of whether a patent is in force, has been abandoned, has expired or has changed ownership.

The EPO accepts no responsibility for the accuracy of data and information originating from authorities other than the EPO. In particular, it cannot guarantee that they are complete, up to date or fit for specific purposes.

To view the legal status information, click on INPADOC legal status in the navigation bar. The status events are listed in chronological order. Status events for B documents are displayed together with the data of the corresponding A document.

First INPADOC legal status event of a patent application

Scroll down the page to see the most recent status event.
Legal status codes

A list of worldwide legal status codes is available on the EPO website under Information on EPO data > Useful tables and statistics > Updated weekly.

http://www.epo.org/searching-for-patents/helpful-resources/data/tables/weekly.html

Look for the title Legal status codes.

To view the list, click on the download link to the right.

The list of status codes opens in your browser.

Example of legal status codes from the worldwide list

To download the list, right-click on the download link to the right and select Save target as from the context menu.

The list of status codes is downloaded as a text-only (*.txt) file.
Data coverage

Like all other patent databases, INPADOC has to rely on the correctness of the data supplied by the co-operating patent offices and the extent to which that data is up to date. In particular, delays in the delivery of bibliographic or legal status data can vary significantly depending on the country concerned and the time period covered.

You should therefore always check whether there are any gaps or delays in certain areas.

An overview of the database contents of Legal Status Service is available on the EPO website under Information on EPO data > Useful tables and statistics > Updated weekly.

http://www.epo.org/searching-for-patents/helpful-resources/data/tables/weekly.html

/. Look for the title Contents and coverage of the INPADOC legal status file.

/. To download the list, click on the download link to the right.

. The list is downloaded as an Excel spreadsheet (*.xls) file.

Further information

To be absolutely sure about the actual status of a patent, refer to the relevant patent office or patent-granting authority direct.

If you have any questions, please contact Patent Data Services at patentdata@epo.org.
INPADOC patent family

An INPADOC patent family is defined as comprising all the documents sharing directly or indirectly (e.g. via a third document) at least one priority. This includes all the patent documents resulting from a patent application submitted as a first filing with a patent office and from the same patent application filed within the priority year with a patent office in any other country.

To view the list of family members, click on INPADOC patent family in the navigation bar.

Simple patent family members are automatically assigned the CPC symbol of the document classified first in CPC.

INPADOC family members with the same CPC symbols

To view the priority document, click on the priority number in the Bibliographic data screen.
All the corresponding documents in the **Also published as** section share the same priority number.

**Priority number and family members in the Bibliographic data screen**

**Common Citation Document**

The **Common Citation Document (CCD)** application provides single-point access to citation data for the patent applications of the IP5 (the EPO, the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO) and the United States Patent and Trademark Office (USPTO), the Canadian Patent Office and the World Intellectual Property Organization (WIPO)).

The CCD consolidates the prior art cited by all participating offices for the family members of a patent application, thus enabling the search results for the same invention produced by several offices to be visualised on a single page.

/ To open the common citation document, click on **CCD** in the toolbar of the INPADOC patent family screen.

    The CCD viewer opens in a new browser window and shows the citation details for the selected patent application.

/ To see the citation details for one of the other family members, click on the relevant application number.
CCD viewer showing citations, classifications and documents for patent family members
Reference topics

A reference topic lists functional information such as facts, options, variables and keys. The reference topic can also provide definition lists and examples. The title of the reference topic should be short and precise.

The GUI description can be considered as a special reference topic which is also function-oriented. A GUI description explains what the user can see on the screen, what can be done in the application or what information can be found. These topics should be consistently named as appropriate to the GUI elements in order to find information quickly.
**Databases in Espacenet**

The following table summarises the different data and search options in the four databases/patent collections:

**Worldwide collection**

and the full-text databases:

Worldwide-DE,
Worldwide-EN,
Worldwide-FR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>Patent collection from 90+ national and regional patent offices from around the world</td>
<td>Patent collection from 90+ national and regional patent offices from around the world</td>
<td>Patent collection from 90+ national and regional patent offices from around the world</td>
<td>Patent collection from 90+ national and regional patent offices from around the world</td>
</tr>
<tr>
<td>Publishing cycle</td>
<td>Updated Monday to Friday as soon as possible after receipt of national patent publications. Bulk uploads of reclassified documents are added to the database during weekends.</td>
<td>EPs every Wednesday (after 14:01 hrs CET)</td>
<td>EPs every Wednesday (after 14:01 hrs CET)</td>
<td>EPs every Wednesday (after 14:01 hrs CET)</td>
</tr>
<tr>
<td>Classification search</td>
<td>CPC and IPC</td>
<td>CPC and IPC</td>
<td>CPC and IPC</td>
<td>CPC and IPC</td>
</tr>
<tr>
<td>Text search</td>
<td>Title, Title or abstract</td>
<td>Full-text search</td>
<td>Full-text search</td>
<td>Full-text search</td>
</tr>
<tr>
<td>Language for search terms</td>
<td>English</td>
<td>English</td>
<td>French</td>
<td>German</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>Documents retrieved</td>
<td>All documents</td>
<td>All documents published in English</td>
<td>All documents published in French</td>
<td>All documents published in German</td>
</tr>
<tr>
<td>Original document for a Euro-PCT application</td>
<td>Publication of the corresponding WO publication</td>
<td>Publication of the corresponding WO application</td>
<td>Publication of the corresponding WO publication</td>
<td>Publication of the corresponding WO publication</td>
</tr>
</tbody>
</table>
# Field identifiers in Smart search

Search terms are not case-sensitive if entered in combination with a field identifier.

<table>
<thead>
<tr>
<th>Field identifier</th>
<th>Search criterion</th>
<th>Data type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>in</td>
<td>inventor</td>
<td>text</td>
<td>in=smith</td>
</tr>
<tr>
<td>pa</td>
<td>applicant</td>
<td>text</td>
<td>pa=siemens</td>
</tr>
<tr>
<td>ia</td>
<td>inventor applicant</td>
<td>text</td>
<td>ia=&quot;smith john&quot;</td>
</tr>
<tr>
<td>ti</td>
<td>title</td>
<td>text</td>
<td>ti=&quot;mouse trap&quot;</td>
</tr>
<tr>
<td>ab</td>
<td>abstract</td>
<td>text</td>
<td>ab=&quot;mouse trap&quot;</td>
</tr>
<tr>
<td>ta</td>
<td>title abstract</td>
<td>text</td>
<td>ta=&quot;mouse trap&quot;</td>
</tr>
<tr>
<td>txt</td>
<td>title abstract inventor applicant</td>
<td>text</td>
<td>txt=diesel</td>
</tr>
</tbody>
</table>
| pn               | publication number | number | pn=ep1000000
pn=wo2014146025 |
| ap               | application number | number | ap=jp19890234567 |
| pr               | priority number  | number    | pr=ep20050104792 |
| num              | application number publication number priority number | number | num=ep1000000
num=wo2007117737 |
| pd               | publication date | date      | pd=200201
pd=10/12/1999 |
| cpc              | CPC: cooperative patent classification | classification | cpc=g06f3/044
cpc=f21 |
| cpcc             | Classification combination | classification | cpcc="C08F8/30", cpcc="C08F297/02" |
| ipc              | IPC: all current and former versions of the IPC | classification | ipc=a63b49/08
ipc=b65 |
<p>| cl               | CPC IPC          | classification | cl=g06f3 |</p>
<table>
<thead>
<tr>
<th>Field identifier</th>
<th>Search criterion</th>
<th>Data type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ftxt, desc, claims</td>
<td>Full text, description, claims</td>
<td>text</td>
<td>ftxt=microscope, desc=lens, claims=laser</td>
</tr>
<tr>
<td>ct</td>
<td>citation/cited document</td>
<td>number</td>
<td>ct=ep1000000</td>
</tr>
</tbody>
</table>
Country codes

The country codes (CC) used in Espacenet are made up of two letters indicating the country or organisation where the patent application was filed or granted (e.g. FR for France).

EPO-specific country codes

AP  African Regional Industrial Property Organization
EA  Eurasian Patent Organisation
EP  European Patent Office
OA  African Intellectual Property Organization
WO  World Intellectual Property Organisation (WIPO)

International country codes

All other codes conform to the international two-letter country codes as published by the ISO in the ISO 3166 standard.

http://www.iso.org/iso/country_codes.htm

You can access the list via the Online Browsing Platform at

https://www.iso.org/obp/ui/#search/code/
## Number formats

The following table lists the applicable number formats for publication numbers, application numbers and priority numbers.

<table>
<thead>
<tr>
<th>Number type</th>
<th>Format</th>
<th>Example</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publication number</td>
<td>CCn…</td>
<td>CH70623</td>
<td>Serial number with 1 to 12 digits</td>
</tr>
<tr>
<td></td>
<td>CCnnnnnnnnnnnnnnnnnn</td>
<td>US2015013545</td>
<td></td>
</tr>
<tr>
<td>EP publication</td>
<td>EPnnnnnn</td>
<td>EP1023455</td>
<td>Leading zeros are added automatically if less than seven digits are entered, e.g. EP1000 will return EP0001000</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP application</td>
<td>EPyyyynnnnnn</td>
<td>EP14405005</td>
<td>EP can be omitted if entered in combination with the ap field identifier or in the application number field The first zero after the year (5th digit) can be omitted The full stop and check digit can be omitted</td>
</tr>
<tr>
<td>number</td>
<td>EPyyyyyyyyyynnnnnnnnnn</td>
<td>EP20140405005</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nnnnnnnnn.n</td>
<td>14405005.1</td>
<td></td>
</tr>
<tr>
<td>PCT publication</td>
<td>WOyyyynnnnn</td>
<td>WO0133678</td>
<td>From 1978 until 30 June 2002 1 July 2002 to 31 December 2003 Single format, used since 1 January 2004</td>
</tr>
<tr>
<td>number</td>
<td>WOyyyyynnnnnn</td>
<td>WO003060809</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WOyyyyynnnnnn</td>
<td>WO2014146025</td>
<td></td>
</tr>
<tr>
<td>Application number</td>
<td>CCyyyyyn…</td>
<td>IN2013MU2285</td>
<td>Serial number with max. 7 digits Special country formats, e.g. India</td>
</tr>
<tr>
<td></td>
<td>CCyyyyynnnnnnnnnnnnnnnnnn</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCyyyyyLLnnnnnnnn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority number</td>
<td>CCyyyyynnnnnnnnn</td>
<td>US20030423700</td>
<td>Original published formats like CCyyyyynnnnnnn have been converted</td>
</tr>
</tbody>
</table>
Date formats

The following date formats can be applied to search for the publication date, filing date and priority date in *Smart search* or *Advanced search*.

<table>
<thead>
<tr>
<th>Date period</th>
<th>Format</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>yyyy</td>
<td>2013</td>
</tr>
<tr>
<td>Month</td>
<td>yyyy-mm</td>
<td>201309</td>
</tr>
<tr>
<td></td>
<td>yyyymm</td>
<td>2013-09</td>
</tr>
<tr>
<td></td>
<td>yyyy-mm-mm</td>
<td>09/2013</td>
</tr>
<tr>
<td></td>
<td>mm/yyyy</td>
<td>09.2013</td>
</tr>
<tr>
<td></td>
<td>mm.yyyy</td>
<td></td>
</tr>
<tr>
<td>Day</td>
<td>yyyymmd</td>
<td>20130904</td>
</tr>
<tr>
<td></td>
<td>yyyy-mm-dd</td>
<td>2013-09-04</td>
</tr>
<tr>
<td></td>
<td>dd/mm/yyyy</td>
<td>04/09/2013</td>
</tr>
<tr>
<td></td>
<td>dd.mm.yyyy</td>
<td>04.09.2013</td>
</tr>
</tbody>
</table>
**Date ranges for the publication date**

There are alternative entry methods returning the same results.

The emphasised examples in the table, i.e. those without field identifiers, work both in *Advanced search* and in *Smart search*.

<table>
<thead>
<tr>
<th>Examples</th>
<th>Search results</th>
</tr>
</thead>
<tbody>
<tr>
<td>pd=2005,2007</td>
<td></td>
</tr>
<tr>
<td>pd=&quot;2005 2007&quot;</td>
<td></td>
</tr>
<tr>
<td>pd=&quot;2005,2007&quot;</td>
<td></td>
</tr>
<tr>
<td>pd=&quot;2005:2007&quot;</td>
<td></td>
</tr>
<tr>
<td>pd within 2005,2007</td>
<td></td>
</tr>
<tr>
<td>pd within &quot;2005, 2007&quot;</td>
<td></td>
</tr>
<tr>
<td>pd within &quot;2005,2007&quot;</td>
<td></td>
</tr>
<tr>
<td>pd within &quot;2005 2007&quot;</td>
<td></td>
</tr>
<tr>
<td>2005-01:2007-01</td>
<td></td>
</tr>
<tr>
<td>01.2005:01.2007</td>
<td></td>
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<tr>
<td>pd=&quot;200501:200701&quot;</td>
<td></td>
</tr>
<tr>
<td>pd=&quot;2005-01:2007-01&quot;</td>
<td></td>
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<tr>
<td>pd=&quot;01.2005:01.2007&quot;</td>
<td></td>
</tr>
<tr>
<td>pd=&quot;01/2005:01/2007&quot;</td>
<td></td>
</tr>
<tr>
<td><strong>pd &gt;2005501</strong></td>
<td>Applications published later than January 2005</td>
</tr>
<tr>
<td><strong>pd &gt;2005-01</strong></td>
<td></td>
</tr>
<tr>
<td><strong>pd &gt;01.2005</strong></td>
<td></td>
</tr>
<tr>
<td><strong>pd &gt;01/2005</strong></td>
<td></td>
</tr>
</tbody>
</table>
| 20120101:20120315  
| 01.01.2012:15.03.2012  
| Applications published from 1. January 2012 onwards up to 15. March 2012 |
|---|---|
| pd within 20120101,20120315 | pd >=20120101 AND pd <=20120315 |
| pd within 2012-01-01,2012-03-15 | pd >=2012-01-01 AND pd <=2012-03-15 |
| pd within 01.01.2012,15.03.2012 | pd >=01.01.2012 AND pd <=15.03.2012 |
| pd within 01/01/2012,15/03/2012 | pd >=01/01/2012 AND pd <=15/03/2012 |
CPC symbols

CPC symbols are derived from IPC symbols as follows:

- CPC symbols keep the same digits after the / (forward slash) as their parent IPC symbol.
- The symbols consist of only numeric characters after the /.
- If a group is specific to the CPC (and thus does not exist in the IPC), additional digits are appended.
- There can be a maximum of six digits after the /.

IPC subgroup

<table>
<thead>
<tr>
<th>A</th>
<th>63</th>
<th>B</th>
<th>49</th>
<th>/027</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>Class</td>
<td>Subclass</td>
<td>Main group</td>
<td>Subgroup slash + (1-3 digits)</td>
</tr>
<tr>
<td>1 letter</td>
<td>2 digits</td>
<td>1 letter</td>
<td>1-3 digits</td>
<td></td>
</tr>
</tbody>
</table>

CPC subgroup extending the IPC

<table>
<thead>
<tr>
<th>A</th>
<th>63</th>
<th>B</th>
<th>49</th>
<th>/0276</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>Class</td>
<td>Subclass</td>
<td>Main group</td>
<td>Subgroup slash + (1-6 digits)</td>
</tr>
<tr>
<td>1 letter</td>
<td>2 digits</td>
<td>1 letter</td>
<td>1-3 digits</td>
<td></td>
</tr>
</tbody>
</table>

CPC 2000 series subgroup adding information

<table>
<thead>
<tr>
<th>A</th>
<th>63</th>
<th>B</th>
<th>2049</th>
<th>/0282</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
<td>Class</td>
<td>Subclass</td>
<td>Main group number</td>
<td>Subgroup slash + (1-4 digits)</td>
</tr>
<tr>
<td>1 letter</td>
<td>2 digits</td>
<td>1 letter</td>
<td>2 + 3 digits</td>
<td></td>
</tr>
</tbody>
</table>
### CPC classification tree

The CPC levels are structured like a family tree, which can be displayed as a tree structure or with a dot markup. The generations are: main group (0 dot), grandparents (1 dot), parents (2 dots), children (3 dots) and great-grand-generations (4 or more dots).

Example:

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>HUMAN NECESSITIES</td>
</tr>
<tr>
<td>A63</td>
<td>SPORTS; GAMES; AMUSEMENTS</td>
</tr>
<tr>
<td>A63B</td>
<td>APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING, CLIMBING, OR FENCING; BALL GAMES; TRAINING EQUIPMENT</td>
</tr>
<tr>
<td>A63B49/00</td>
<td>Tennis, badminton or like rackets</td>
</tr>
<tr>
<td>A63B49/02</td>
<td>Ó Frames</td>
</tr>
<tr>
<td>A63B49/027</td>
<td>ÓÓÓ Throat section, i.e. sections and elements between head and handle</td>
</tr>
<tr>
<td>A63B49/0276</td>
<td>ÓÓÓ T-shaped connection elements between head and handle</td>
</tr>
<tr>
<td>A63B2049/0282</td>
<td>ÓÓÓ with two legs having mutually different constructions</td>
</tr>
</tbody>
</table>
IPC Symbols

A full classification symbol defines an IPC subgroup and is made up of alphabetic and numeric characters in a specific pattern.

<table>
<thead>
<tr>
<th>A63B49/02</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
</tr>
<tr>
<td>Section 1 letter</td>
</tr>
</tbody>
</table>
Field help

Title
Short text describing the contents of the application.
In the title field, you can enter up to ten search terms, separated by spaces or the appropriate operators.

Title or abstract
Searches both in the title and the abstract.
The title is a short text describing the contents of the application. The abstract contains a concise summary of the disclosure of the invention as contained in the description, claims and drawings.
In the title or abstract field, you can enter up to ten search terms, separated by spaces or the appropriate operators.

Publication number
Number assigned to a patent application on publication.
Publication numbers are generally made up of a country code (two letters) and a serial number (variable, one to twelve digits), e.g. CH706230.
EP publication numbers are made up of the two-letter EP country code and a seven-digit serial number, e.g. EP2822430.
PCT publication numbers using the single format WOyyyyynnnnn are made up of the two-letter WO country code, the four-digit year and a six-digit serial number, e.g. WO2013131722.

Application number
Number assigned to an application when it is filed.
Application numbers are generally made up of a country code (two letters), the year of filing (four digits) and a serial number (variable, max. seven digits), e.g. FR20120055299. Leading zeros can be omitted.
EP application numbers are made up of the two-letter EP country code and an eight-digit serial number. e.g. EP10755253.
PCT application numbers consist of the country code \textit{WO} followed by the four-digit year of filing, the two-letter country code of the country where the application was filed and a five-digit serial number, adding up to a fixed length of 13 characters, e.g. \textit{WO1998US04141}.

Some countries use specific different application number formats, e.g. China, Germany, Italy and India. For more information, please refer to the official websites of the patent organisation in question.

**Priority number**

Number of the application in respect of which priority is claimed, i.e. the application number of the claimed priority document.

Priority numbers are generally made up of a country code (two letters), the year of filing (four digits) and a serial number (variable, max. seven digits), e.g. \textit{GB20130021235}. Leading zeros can be omitted.

**CPC**

The Cooperative Patent Classification (CPC) system is jointly developed and maintained by the EPO and the USTPO. The CPC is based on the IPC (and the former ECLA), but it contains more detailed subgroups, thus extending the IPC.

CPC symbols are entered using the classification pattern, e.g. \textit{A63B49/0276} (extending the IPC subclass \textit{A63B49/02})

\textit{A 63 B 49 /0276} consists of
  - Section: 1 letter
  - Class: 2 digits
  - Subclass: 1 letter
  - Main group: 1-4 digits
  - Subgroup: forward slash + 1-6 digits

There may be more than one classification symbol per application.

**IPC**

The International Patent Classification (IPC) system is developed and maintained by WIPO. The IPC provides a hierarchical system of language-independent symbols for the classification of patents and utility models according to the different areas of technology.

IPC symbols are entered using the classification pattern, e.g. \textit{A63B49/02}
**A 63 B 49 /02** consists of

- Section: 1 letter
- Class: 2 digits
- Subclass: 1 letter
- Main group: 1-3 digits
- Subgroup: forward slash + 1-3 digits

There may be more than one classification symbol per application.