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INTRODUCTION

WHAT IS THE PATENTSCOPE SEARCH SYSTEM?

You’re a patent attorney and need to find a specific patent document…

You’re an inventor and want to see whether your latest invention has already been patented…

You’re a researcher and are interested in seeing which technologies have been developed in your field…

You’re an entrepreneur and want to find out who your competitors are and what they’re up to…

The PATENTSCOPE search system just might be the right tool for you!

The PATENTSCOPE search system is the FREE OF CHARGE patent search system provided by the World Intellectual Property Organization (WIPO) that allows you to access millions of patent documents.

This User’s Guide will help you get to know the PATENTSCOPE search system and learn how to get the most out of its powerful search and analysis features.

ABOUT THIS GUIDE

The PATENTSCOPE search system is constantly improving to provide new features and new content to its users. In fact, from the time the writing of this guide started to the time it was completed, a few things have changed on the interface. To keep up to date on the latest developments and changes to the PATENTSCOPE search system, look at: https://www.wipo.int/patentscope/en/news/

To help readability, a few conventions were used in this guide:

- Web Sites urls and email addresses are in blue in Courier; and
- to refer to something that you see on the interface italics was used;

- tips are indicated with

Note: Screenshots in this guide reflect what the interface was like in October 2021; a few significant changes took place during the writing of this guide.
WHAT IS THE DATA COVERAGE?

PATENTSCOPE gives you access to millions of patent documents, namely:

- International Patent Applications filed under the PCT (Patent Cooperation Treaty)
- Regional and national patent collections from numerous participating countries and organizations, including:

  → Argentina → Israel
  → ARIPO (African Regional Intellectual Property Organization) → Italy
  → Australia → Jordan
  → Bahrain → Kenya
  → Brazil → Lao People’s Democratic Republic
  → Brunei Darussalam → Latvia
  → Bulgaria → Lithuania
  → Cambodia → Malaysia
  → Canada → Mexico
  → Chile → Morocco
  → China → Netherlands
  → Colombia → New Zealand
  → Costa Rica → Nicaragua
  → Cuba → Panama
  → Czech Republic → Peru
  → Czechoslovakia → Philippines
  → Denmark → Portugal
  → Dominican Republic → Republic of Korea
  → EAPO (Eurasian Patent Organization) → Romania
  → Ecuador → Russian Federation
  → Egypt → Russian Federation (USSR data)
  → El Salvador → Saudi Arabia
  → EPO (European Patent Office) → Singapore
  → Estonia → Slovakia
  → Finland → South Africa
  → France → Spain
  → Georgia → Sweden
  → Germany → Thailand
  → Germany (DDR data) → Tunisia
  → Greece → United Arab Emirates
  → Guatemala → United Kingdom
  → Honduras → United States of America
  → India → Uruguay
  → Indonesia → Vietnam

Those countries share their national/regional data with WIPO; they are not the PCT applications entering into national phase into those countries. National phase information is available here: https://patentscope.wipo.int/search/en/nationalphase.jsf
Please check our website, new collections become available on a regular basis. The collections available are listed in the Advanced Search/Field Combination page; click the arrow sign next to Offices to see the list.

UP-TO-DATE & DETAILED DATA COVERAGE

For the most up-to-date information on data coverage, please go to the Help menu, PATENTSCOPE Help, Data coverage national collections at:
https://patentscope.wipo.int/search/en/help/data_coverage.jsf
The integration of non-patent literature (NPL) in PATENTSCOPE has now started with the open-access content from Nature and Wikipedia (only technology and scientific content filtered using an in-house algorithm).

A new button to include the NPL in the result list is now available in:

1. The advanced search and the Field Combination interfaces
2. The result list: the refine options is available by clicking on Include NPL

![Refine Options](image)

All the PATENTSCOPE search features are available to perform searches in the NPL in PATENTSCOPE.

Useful fields to search the NPL content:

<table>
<thead>
<tr>
<th>Field</th>
<th>Information retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU: Hyojin Kim</td>
<td>author, Hyojin Kim for example, of the article</td>
</tr>
<tr>
<td>CTR:ZZ</td>
<td>only NPL information search criteria.</td>
</tr>
<tr>
<td>DP:(30.12.2020)</td>
<td>publication date, December 30th, 2020 for example</td>
</tr>
<tr>
<td>DTY:NPL</td>
<td>all NPL the records</td>
</tr>
<tr>
<td>EN_AB: (electric bicycle)</td>
<td>information in the abstract of the article, electric bicycle for example</td>
</tr>
<tr>
<td>EN_DE: (electric bicycle)</td>
<td>information in the article, electric bicycle for example</td>
</tr>
<tr>
<td>EN_TI: (electric bicycle)</td>
<td>information in the title of article, electric bicycle for example</td>
</tr>
<tr>
<td>IC: G06F</td>
<td>code IPC, G06F for example (assigned by an AI procedure)</td>
</tr>
<tr>
<td>JO: (British Journal of Cancer)</td>
<td>journal of the article, for example, the British Journal of Cancer</td>
</tr>
<tr>
<td>PN: 10.1038/s41416-019-0673-5</td>
<td>publication number of the article, for example: 10.1038/s41416-019-0673-5</td>
</tr>
<tr>
<td>PU: Nature</td>
<td>publisher or source of NPL, for example Nature</td>
</tr>
</tbody>
</table>
In the Analysis in the result list, NPL information is available in the Kind code column.

If selected, the result list will include NPL information ranked by relevance together with the patent documents that match the search performed.

An example of an NPL document:

The information in the NPL Biblio Data tab is available for download for logged-in users. The link to the source allows users to export the content.
In the Description tab, the full-text of the article is available and the machine translation button is available if translation is needed:

SEARCH INTERFACES

DIFFERENT LANGUAGES

Interface languages
The search interface is available in 10 languages that can be selected in the navigation bar (black bar on the top of the interface).

**Search languages**
You can search in all the filing languages of the documents contained in PATENTSCOPE, such as Arabic, Bulgarian, Cambodian, Chinese, Danish, English, Estonian, French, German, Greek, Hebrew, Italian, Japanese, Korean, Laotian, Portuguese, Romanian, Russian, Spanish, Thai, Vietnamese, etc.

**SEARCH INTERFACES**

There are 5 ways to conduct a search using PATENTSCOPE Search service. Those options can be selected from the *Search* menu as indicated below.

1. **Simple search**

The *Simple Search* interface is the default interface.
It offers 7 predefined search fields:

1. **Front page**: the search criteria you entered in this field will be searched in the front page of the document (title, abstract, names and numbers).
2. **Any field**: the search criteria you entered in this field will be searched in any fields of the document.
3. **Full-text**: enter your query in this field if you are interested in full-text.
4. **ID/Number**: enter publication number, filing number, etc.
5. **IPC**: enter any International Patent Classification code.
6. **Names**: enter your search in this field to look for the name of an inventor, an applicant, a company, etc.
7. **Publication Date**: enter a date here to search for specific publication dates

You can use the *Simple Search* interface to search for:

- a specific number: a reference to patent document in the press, in a trial, etc.
- an individual, an inventor, an applicant, etc.
- a company whether it is for personal interest, for merging and/or acquisition purposes or to keep track of the work of a competitor
- an IPC code
- a specific publication date
- a subject matter expressed with simple keywords, a concept that is very specific in order to have a limited number of results

Use the *Browse by week* option to see all international applications published during a given week. Click the *Query Examples* to be provided with search examples. If you click on those examples, they will automatically appear in the search box. They give you good examples of the kind of searches that can be performed in the *Simple Search* interface:
To use the *Simple Search* interface:

1. Select one of the 7 available search fields from the drop-down menu;
2. Enter your search terms into the selected field;
3. Click the search button

To look for a specific patent document number, use the *ID/Number* field. To look for any information related to a name (inventor, agent, etc.), use the *Names* field.

2. **Advanced Search**
The Advanced Search is the PATENTSCOPE expert search interface that can be used to create complex search queries using an unlimited number of terms.

The PATENTSCOPE search service offers a wide range of operators that can be used to combine search terms, including Boolean operators, proximity operators, and range operators. Using these operators will allow you to customize your results. You can also use wildcard operators to search for variants of terms based on a common stem, or root.

For more information about operators available in the PATENTSCOPE search service, look at: https://patentscope.wipo.int/search/en/help/querySyntaxHelp.jsf

The Advanced Search interface uses field codes to define the fields in which search terms must be found.

More information about field codes can be found at: https://patentscope.wipo.int/search/en/help/fieldHelp.jsf

Some examples of the use of the Advanced Search:

1. Searching for inventions made by Steve Jobs published during the period from 2007 to 2009 comprising the keyword “touch” in the description.

   \[
   \text{IN:}(\text{Jobs}) \text{ AND DP:[2007 TO 2009] AND EN\_DE:)(\text{touch})
   \]

   This search query uses field codes, a Boolean operator, and a range operator.

   The field codes are IN for inventor, DP for publication date, and EN\_DE for English description.

   The Boolean operator AND is used to ensure that all search terms are included in the search results (i.e. that the results are for Jobs as inventor, within the given publication date range, and using the word “touch”).

   The range operator TO is used to define a range of publication date values.

2. Searching for inventions related to cutting tree trunks:
This search query will retrieve over 10,000 results, many of which are not related to cutting tree trunks.

This search query retrieves a few hundred results; most of which are related to the wood industry. It uses a proximity operator NEAR to ensure that the two terms are close to each other in your results and specifies that they must be within 5 words of each other by defining the value as NEAR5. Similarly, you could specify that the terms must be within any other number of words of each other, e.g. NEAR4, NEAR100.

3. Searching for surgical instruments that are referred to before the paragraph “Field of the invention”:

The operator BEFORE allows users to define the part of the document the search should be carried out: only documents containing surgical instruments positioned 100 words after “Field of the invention” will be retrieved.

To use the **Advanced Search** interface:

1. Enter keywords/Boolean expression/field codes etc. Please read the Annex section of this guide or go to the Help menu on the search interface for a complete list of Boolean expressions and **Fields Definition**;
2. Select the collection/s you are interested in using the arrow;
3. Select the language in which you would like to perform the search using the arrow;
4. **Stemming** is on by default. It is a process that removes ending in order to find keywords with common roots such as electric, electricity, electrical. The stemmer is related to the language of the search, in this example, it is therefore the English stemmer.
5. Tick this box if you would like to have family information in your result list. Please read the section in this Guide about families in PATENTSCOPE.
6. Tick this box if you would like to have non-patent literature information in your result list. Please read the section in this Guide about non-patent literature in PATENTSCOPE.
Expand with related terms

This feature allows you to expand your query with synonyms that are automatically provided by PATENTSCOPE

Enter your query in the query box and click the Expand with related terms button

Your new query is displayed just below:

The click the Expanded Search button to run your search.

💡 Click the Query Examples to be provided with search examples. If you click on those examples, they will automatically appear in the search box.
3. Field Combination

The Field Combination interface can be used to structure a more targeted search using specific search criteria in any search fields (e.g. title, abstract, description, etc.) can be performed using this interface.
The Field Combination Search, a list of preset search fields that can be combined according to the users’ needs, should be used to search together different concepts such as:

- a date and an inventor
- an inventor and a company,
- etc.

Any combination of the preset search fields available in the Field Combination Search is possible.

Some examples of the use of the Field Combination:

- Searching for the inventions filed by Shimano in 2017. In the drop-down box, select the field Applicant Name and enter Shimano; select AND and the field Publication date and enter 2017.

- Searching for applications containing microchip with licensing availability. In the drop-down box, select English Claims and enter microchip, then tick the Licensing availability box (the last row in the Field Combination interface).
Searching for missing information using the empty field option: for example, you can search applications without any IPC code. In the row before last, select the *IPC* in the drop-down box and tick yes next to empty.

To use the Field Combination interface:

1. Select the field/s of interest using the arrow of the drop-down menu
2. Use the **AND/OR** boxes to add or include fields
3. If you would like to add more fields or remove one or more fields, please click the + or – signs:

4. Select the collection/s you are interested in the drop-down menu:

5. Select the language in which you would like to perform the search in the drop-down menu:

6. Stemming is on by default. It is a process that removing ending in order to find keywords with common roots such as electric, electricity, electrical. The stemmer is related to the language of the search, in this example, it is therefore the English stemmer:

   ![Stemming](image)

7. Tick this box if you would like to have family information in your result list. Please read the section in this Guide about the families:

   ![Single Family Member](image)

8. Tick this box if you would like to have non-patent literature in your result list. Please read the section in this Guide about non-patent literature:
At the bottom of the search page, the number of results are indicated, allowing therefor to amend the query is necessary:

![Field Combination](image)

From the result page, to go back to Field Combination with your search criterias, go to the Search menu and select Field Combination.

4. CLIR - Cross-Lingual Information Retrieval

![Simple Search](image)
CLIR stands for Cross Lingual Information Retrieval. This tool allows you to expand your search by including patent documents in your result list that were disclosed in a foreign languages: for example, you enter one keyword in English, your result list will include that keyword in English and its synonyms as well as the translation of both the keyword and the synonyms into 13 languages. The tool first finds synonym of your query and then translate everything into 13 languages. The following languages are available:

- Chinese  
- Danish  
- Dutch  
- English  
- French  
- German  
- Italian  
- Japanese  
- Korean  
- Polish  
- Portuguese  
- Russian  
- Spanish  
- Swedish

Just enter one or more terms in one of those languages in the search box and the system will suggest variants and translate the term(s), thus allowing you to search patent documents disclosed in all of these languages.

**CROSS LINGUAL EXPANSION**

1. Enter the search query in the search box. Up to 5 keywords can be entered and “…” are supported.
2. Select the language of your query.
3. Select the Expansion mode:
   a. Supervised will allow you to select the technical domain associated with your query and the variants relevant to your query.
   b. Automatic will generate the results immediately without any further user input.

4. Select the level of precision. If you favor precision, an expanded query will be built in order to retrieve only the most relevant results at the risk of missing some results. If you favor recall, an expanded query will be built in order to retrieve more results at the possible expense of accuracy.
   
   **Precision** is defined as the proportion of relevant documents in the set of all documents returned by a search query. Precision is a measure of exactness.
   
   **Recall** is defined as the number of relevant documents retrieved as fraction of all relevant documents. Recall is a measure of completeness.

5. Click the Search (automatic mode) or Select Domains (supervised mode) button.

Automatic mode: 1 step

After entering your query, select the query language, the expansion mode, define the level of precision and click the search button:

The result list will be displayed with the new query containing synonyms and translations of your query:
Supervised mode: 4 steps

Step 1: enter your query, select the query language, the expansion mode, define the level of precision and click the Select Domains button:

Step 2: Select the technical domain/s:

The PATENTSCOPE search system will propose a list of domains to which the keywords you entered in the first step could belong. You can edit the proposals by:
- removing the technical domains that are not relevant with just one click on the cross next to the domain:

- selecting relevant domains in the drop-down menu:

Up to 5 domains can be selected.

Then click the *Expand Synonyms* button

**Step 3: Select the variants relevant to your query**

The system will suggest variants for the terms of your initial query. Variants are proposed for each term of your query click the *term* button to check the proposals for all the terms. Select the checkboxes next to the variants relevant to your query. If you know a variant that is not in the proposed list, click on *Add variant* button, enter the variant in the box and select the relevant domain.
Please note that it is necessary to check if each displayed variant applies otherwise you might have incomplete results.

Click on **Translate Selected Terms**.
Step 4: Check the proposed translations and define the fields in which the search should be performed.

1. Check the translated terms by going in each tab. The **remove translation** button will remove language that the user is not interested in.

2. Define the fields where the search will be performed. We recommend using title and abstract because it is fast. If you are not satisfied with the amount of results, add then first claims and finally description to the scope of your query to try to find more results.

3. Define the distance between the words. We recommend using the unconstrained option when searching titles and abstracts. If you search description or claims, we recommend using the sentence or paragraph distance to make sure the concepts you search appear close to one another in the text of the returned results.

4. Untick the **Stemming** option if you would like to have results including only the exact term of your search. Stemming uses the root form of the word, for example if you search “swim”, the results will include swimming, swimmers etc.

5. Click on **Submit Query**. Results will be retrieved from the PATENTSCOPE search service and results will be displayed.
5. Chemical structure search

Available from the Search menu, for logged-in users, the chemical structure search allows users to search for chemical information in PATENTSCOPE.

If you do not have a WIPO account to login-in, please see Login section of this Guide menu.

There are four options to perform a search.
**Convert structure** tab
Convert a structure allows users to select the input type of the search such as the name of the chemical compound.

Different option to enter your search are available: name of the chemical compound such as trivial name, commercial name, IUPAC name or CAS name, the International Nonproprietary Name (INN) InchI, InchIkeys or SMILES.
You can submit your query directly or check the structure using the show in editor. This button will process the input data to convert the compound name, INN, InchI or SMILES into the corresponding structure.

**Structure editor** tab
Structure editor allows users to draw or edit a structure. Chemical structures, reactions and fragments can be drawn in a very intuitive way using the symbols familiar from chemical sketches on paper.
Upload structure tab
Upload a structure allows users to upload a chemical description file in a supported format; for example: MOL, SMILES as well as a bitmap representation of the chemical compound such as png, gif, tiff, jpeg format. The Search for scaffold button will enlarge the search as the compound will be searched more generally, taking into consideration only the 1st part of the InChIKey. The scaffold is Basic skeleton of a molecule to which further groups and moieties are attached.

Substructure search tab
Additionally to the “Exact Structure Search”, the functionality to search substructures within chemical compounds is now also available. The “Substructure Search” can be submitted from the “Structure editor”.

![Image of upload structure tab](image1)

![Image of substructure search tab](image2)
After a substructure search has been launched, a list of structures containing the query molecule will be returned (ordered as a grid). The matching substructure is shown highlighted (blue color) by each molecule hit.

You can select one or several structures before submitting the search by clicking on the checkboxes or you can select (or deselect) all the chemical compounds on the page clicking the buttons “Select all” (or “Clear all”).

A maximum of 1024 chemical compounds can be selected for the search of the patents. If selection contains more than 1024 chemical compounds, a message will be displayed as shown in Error! Reference source not found..

If the “substructure search” takes longer than 4 sec., a link with the label “Show more” will appear on the last page indicating that the substructure search is not completed (s. Error! Reference source not found.). This information may also be inferred by the percentage of the result list at the top of the substructure list.
Markush Search in PATENTSCOPE

Markush searching refers to finding an exact structure or a substructure or a fuzzy structure of interest in documents with a range of chemical structures defined by a Markush structure.

Within the PATENTSCOPE system there are two ways of carrying out a Markush search.

Firstly, in order to enable a rapid search within structures contained in documents defined by a Markush formula, these Markush structures have been enumerated and the relevant document annotated with the respective InchiKeys in the same way as for the normal chemical structures in PATENTSCOPE documents which have been identified as chemical related.

This function is available in the Chemical Compounds Search opening page by selecting the “Include enumerated Markush structures” function and by clicking on the “Exact Structure Search” button:
The results are displayed as follows:

Note the new PATENTSCOPE search field ENUM that is used to index the enumerated InchiKeys.
The advantages of the Markush search by enumerations are:

- **Simplicity:** you only need to tick a box to search Markush Formulae
- **Response times:** the search is executed in a matter of seconds
- **Full power of combination with all other PATENTSCOPE fields using Boolean logic:** for example if you want to search cimetidine in Markush structures but only documents concerning Mandelson syndrome, you could use the search query: 
  “ENUM:(AQIXAKUUQRKLND-UHFFFAOYSA-N) AND EN_DE:Mandelson”

The disadvantages are:

- **Reduced recall:** the Markush enumeration algorithm enumerates each Markush formula to a maximum number of 500 Inchikeys, starting with the simpler structures that match the Markush definition. The more complicated structures will not be retrieved.
- **Only exact compound searches can be conducted**

**Secondly,** another more elaborate search is available from the structure editor page. To arrive at this page when you are using a name, or chemical formula as your input, firstly, type in your search term and then click the “show in editor” button as shown below:

![Structure Editor](image)

In this case the search term is lansoprazole and when the structure editor opens you need to scroll down to beneath the structure window and a tab with the option of “Markush Search” is visible which gives the option of four different search types, see below:
This search uses a manually-curated database where the structures are represented as chemical MOL files and the search uses a complex chemical matching algorithm.

You can specify the matching algorithm you want to be applied between your search structure and the Markush formulae indexed in the system:

- exact match
- substructure match
- fuzzy match

This more complex search technique takes longer and once the first illustrative results are displayed there is the option of a batch search in which your search will carry on in the background and your results will be available in your PATENTSCOPE account a while later.

Clicking on the “show more” link allows to search interactively for more matches for one more minute and the percentage of the indexed Markush structures that have been searched so far increases accordingly:
Markush structures are identified by their unique number, attributed by Clarivate Analytics (Here: 9117-08201, 9138-09401, …)

When you are satisfied with the found Markush structures (or have searched them all), the next step is to search for the corresponding patent documents. This is done by selecting the displayed Markush structures of interest up to a maximum of one thousand (you can click on the “select all” button if applicable) and then click on the “Search” button.

And finally you get the PATENTSCOPE results list:
The MN search field also allows you to search directly if you already have one or more Clarivate Markush numbers to search.

Please note:

1. The search by matching structures implemented in PATENTSCOPE has a limitation in the sense that all repeating groups in the indexed Markush structures are standardized to one repetition i.e. in a chemical structure with \(-\text{(CH}_2\text{)}_n-\) only n=1 will be found. As a consequence, you may need to manually edit your searched structures if it contains similar repeating groups.

2. There is the capacity to define variable groups for your searched structure in the structure editor. This is achieved by using the pre-defined groups to change an atom properties by firstly drawing a skeleton, selecting the atom properties where you wish to place the pre-defined group using the highlighted button in the image below, selecting the query atom button where you have the choice of pre-defined groups to take the place of the selected atom:
Markush searching using the matching algorithms has the following advantages:

- **Recall:** all structures matching a given Markush structure can be searched (not only the 500 simplest ones as for the enumerated structures)
- **Richness of what to search:** Markush structures can not only be searched for exact compounds but also for compounds with specified variable groups
- **Richness of how to search:** three levels of matching algorithms are provided with increasing recall and decreasing precision: exact, substructure, fuzzy substructure which automatically introduces the variable groups as above in the query atom tab

And the following disadvantages:

- **Very long response times**
- **Repeating groups not supported**
- **Complexity:** chemical knowledge required to select the found Markush structures of interest

To conclude, when viewing the search result record details of a patent document, a new tab has been defined to display the associated Markush structures and enumerations:
1. EP0423748 - STABILIZED PHARMACEUTICAL COMPOSITION AND ITS PRODUCTION.
FAMILIES IN PATENTSCOPE

DEFINITION

PATENTSCOPE Patent Families denote the grouping of different publications of the same invention by different authorities.

The PATENTSCOPE Patent Families include patent documents via the PCT route and the Paris route.

The PCT families are a subset of the PATENTSCOPE Patent Families. They include:
1. A PCT patent application (IC1);
2. Its national entries either
   a. reported as national entries by the participating offices prior to their publication (IC2 or IC3) or
   b. after publication as part of the bibliographic data, International Convention data other than Paris Convention (IC2); and
3. Its priority application if first and only priority (IC5);

The PCT families can further be enriched by adding:

4. US related documents of US patents already part of the PCT family such as the divisionals, continuations, reissues and republications of those publications. Continuations in part are not included; and finally
5. Any applications that have not followed the PCT route but share the same priorities as the members of the PCT family.

Further to this, the Paris route subset of the PATENTSCOPE Patent Families include:

1. All applications that share the same priorities and where there is no PCT application sharing those priorities (IC4); and
2. US related documents of the US patents already part of the PCT family such as the divisionals, continuations, reissues and republications of those publications. Continuations in part are not included (IC6);
3. The priority application if first and only priority;
4. National application related to another application of the same office already included in the family, such as divisionals, continuations, republications etc.

The IC (Inclusion Criteria) codes indicate which of the criteria listed above was first met and used to include the invention in the family. This does not mean that the criteria listed next to the invention it is the only criteria met. A national entry for example that is denoted as IC2 meets also IC4 because it shares the priorities with the PCT application and the other IC2 applications. This information can be found below the application date in the family tab of the patent document:
IC CODES

<table>
<thead>
<tr>
<th>Codes</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC1</td>
<td>A published PCT application from which family originated</td>
</tr>
<tr>
<td>IC2</td>
<td>A national entry of the published PCT application in PATENTSCOPE. If not visible in National Phase tab, taken from bibliographic data of national document</td>
</tr>
<tr>
<td>IC3</td>
<td>A national entry of the published PCT application not available in PATENTSCOPE</td>
</tr>
<tr>
<td>IC4</td>
<td>US application related to one of the other US application/s</td>
</tr>
<tr>
<td>IC5</td>
<td>Application is the only priority of the applications of this family</td>
</tr>
<tr>
<td>IC6</td>
<td>Connected by priority field</td>
</tr>
<tr>
<td>IC7</td>
<td>National application related to another application of the same national office already included in the family</td>
</tr>
</tbody>
</table>

When hovering the cursor over the code, a window will pop up with the definition of the code in question:
IC1: Published PCT application = origin of the family + information in the National Phase tab
Example of information available in the National Phase tab of PATENTSCOPE
Example of information taken from the bibliographic data. For the Chinese, US and Malaysian documents, the “prior PCT field” in the bibliographic data was used. This “Prior PCT field” is a field not shown in the PATENTSCOPE interface. This information is available in the database provided by the offices and which complements the national phase information.

IC3: National entry of a published PCT application not found in PATENTSCOPE
The patent documents in question are not available in PATENTSCOPE because these applications entered the national phase in the relevant offices but were not published yet at the time of the creation of the document.

IC4: US application related to one of the US applications already included in the family as either a divisional, continuation, reissue or republication. Continuations-in-part are not included.

The relationship between the members of the family can be viewed in the Description tab or in the XML available in the Documents tab.
Example of the XML available in the *Documents* tab in PATENTSCOPE:

```
<cn-related-documents>
  <continuation>
    <relation>
      <parent-doc>
        <document-id>
          <country>US</country>
          <doc-number>16508060</doc-number>
          <date>20200101</date>
        </document-id>
        <parent-grant-document>
          <document-id>
            <country>US</country>
            <doc-number>10870337</doc-number>
          </document-id>
        </parent-grant-document>
      </parent-doc>
      <child-doc>
        <document-id>
          <country>US</country>
          <doc-number>17003214</doc-number>
        </document-id>
      </child-doc>
    </relation>
    <continuation>
      <relation>
        <parent-doc>
          <document-id>
            <country>US</country>
            <doc-number>16598403</doc-number>
            <date>20190311</date>
          </document-id>
          <parent-grant-document>
            <document-id>
              <country>US</country>
              <doc-number>10618735</doc-number>
            </document-id>
          </parent-grant-document>
        </parent-doc>
        <child-doc>
          <document-id>
            <country>US</country>
          </document-id>
        </child-doc>
      </relation>
    </continuation>
  </continuation>
</cn-related-documents>
```
IC6: applications included in the family based on matching priorities
IC7: a national application related to another application of the same national office already included in the family. It indicates the relationships such as divisionals, republications, reissues etc. It can be considered as the equivalent of IC4 for other national offices than the USPTO.
GROUP RESULTS BY FAMILIES

To use the “Single Family Member” option, go to:

1) The result list (also when using the Simple search interface) to select the option *Single Family Member* to open the *Refine Options*:

![Refine Options](image1)

2) The Advanced Search offers the option to select the *Single Family Member* option before the search:

![Advanced Search](image2)

3) The Field Combination offers the option to select families before the search:
THE COOPERATIVE PATENT CLASSIFICATION

The Cooperative Patent Classification (CPC) system, in force as of 1 January 2013, is a bilateral system that jointly developed by the EPO and the USPTO. It combines the best classification practices of the two offices.

In PATENTSCOPE, the CPC values are imported from DocDB and national offices as follows:

- 59 National offices+PCT: gathered regularly from DocDb and the national offices. PATENTSCOPE contains, at the time of writing this Guide, more than 290 million of CPC entries, which correspond to more than 51 million of distinct filings.
- Daily updates
### N. of distinct filings classified under CPC classification

<table>
<thead>
<tr>
<th>Country</th>
<th>N. of filings</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>11,538,100</td>
</tr>
<tr>
<td>CN</td>
<td>8,875,231</td>
</tr>
<tr>
<td>JP</td>
<td>5,337,705</td>
</tr>
<tr>
<td>EP</td>
<td>3,777,520</td>
</tr>
<tr>
<td>KR</td>
<td>2,058,568</td>
</tr>
</tbody>
</table>

CPC statistics as of February 2020

### SEARCH FIELDS

2 search fields are available: CPC, Classif. Classif is the combination of CPC and IPC.

In the example below, the query: CPC:(Y02A*) returns almost 550,000 results, which are grouped by family.
To search for CPC information, go to the Field Combination and select *All Classifications* (combination of IPC and CPC) from the drop-down menus.

Those fields can also be found in the Advanced Search: just start typing *class* and the matching fields will appear below:

**THE BROWSE MENU**
BROWSE BY WEEK (PCT)

WIPO publishes new PCT applications every week on Thursday. Selecting *Browse by week* gives access to a list of PCT applications by publication week.

Use the arrow of the drop-down menu to select a PCT publication week.

The result list can be downloaded using the Excel download button and IPC statistics can be accessed:
IPC statistics available in PATENTSOCPE provide a picture of the global trends in PCT applications. For example, it can show who the main and/or new main actors are etc. It takes into account applications that have IPC codes. Out of 3000 published applications, about 100 do not have any IPC code.

The column ∑ last 5 gazettes shows the number of occurrences of a code in the last 5 gazettes. The column Δ shows the increase/decrease in the last gazette. Breakout a major difference in the use of a code in the last 5 gazettes.

Each column is sortable. A tooltip pops up on the individual gazette columns to indicate the delta with the previous week.

You can select more than one code to be display in the graphic at the bottom of the page that displays the values for the last 13 weeks (3 month). There is the chart option to have the information in a graph format.

GAZETTE ARCHIVE

In the Gazette Archive, you will find searchable official lists of all published PCT applications since 1978. View includes details about each document in the publication selected.
### PCT PUBLICATIONS - GAZETTES ARCHIVE

**Year:**
- **2019**

<table>
<thead>
<tr>
<th>Download</th>
<th>Publication Date</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/2019</td>
<td>03.01.2019</td>
<td>6,730</td>
</tr>
<tr>
<td>02/2019</td>
<td>10.01.2019</td>
<td>4,191</td>
</tr>
<tr>
<td>03/2019</td>
<td>17.01.2019</td>
<td>4,385</td>
</tr>
</tbody>
</table>

### PCT PUBLICATIONS - GAZETTES ARCHIVE - 2020

**Gazette:**
- **01/2020**

<table>
<thead>
<tr>
<th>WG Number</th>
<th>Title</th>
<th>Kind</th>
<th>Appl.</th>
<th>IPC</th>
<th>Applicant</th>
</tr>
</thead>
<tbody>
<tr>
<td>WO/2020/001477</td>
<td>DUAL-PROTOCOL FOR MOBILITY ENHANCEMENT</td>
<td>Initial Publ...</td>
<td>CN20...</td>
<td>MEDITATEK SINGAPORE PTE. LTD.</td>
<td></td>
</tr>
<tr>
<td>WO/2020/001480</td>
<td>METHOD AND SYSTEM FOR PACKAGING TILES BY GRADE</td>
<td>Initial Publ...</td>
<td>CN20...</td>
<td>KEDA CLEAN ENERGY CO., LTD.</td>
<td></td>
</tr>
</tbody>
</table>
SEQUENCE LISTING

*Sequence Listing* gives access to the lists of nucleotide and or amino acid sequence listings contained in published PCT applications. Use the 2 drop-down menus shown below to select the year and publication week.

NATIONAL PHASE ENTRIES FULL DOWNLOAD

Here you can download all the national phase entries available at the time of the download.
NATIONAL ENTRIES INCREMENTAL DOWNLOAD (LAST 7 DAYS)

Here you can download the national phase entries of the last 7 days.

AUTHORITY FILE DOWNLOAD STANDARD ST37
Download the official PCT applications of the current year.

AUTHORITY FILE DOWNLOAD CURRENT YEAR
Download option of the official PCT publications of the current year.

AUTHORITY FILE DOWNLOAD ALIMENT
Download option of all the official PCT publications since 1978.

SEARCH RESULTS

DISPLAY OF THE SEARCH RESULTS

The search query, whether you performed a SIMPLE; ADVANCED; FIELD COMBINATION, CLIR or CHEMICAL COMPOUNDS search, will return a list of results in a window as shown below.

It provides bibliographic data with search terms highlighted and allows accessing of detailed records by clicking on publication number and title.
The first component of this window:

A Refine Search button allows you to refine your search
B Sort result button: by relevance or other criteria

Sort:

Relevance ▼
Pub Date Desc
Pub Date Asc
App Date Desc
App Date Asc

C Define the number of results per page: The list length option allows you to increase the number of displayed results per page (10 by default) to up to 200.

D Select the preferred display of the results

View:

All ▼
Simple
Double
All
All+Image
Image
Multi-columns

The view option allows you to select the components displayed in the result list: simple, double, all, all+image, image and multi-columns. Simple displays only the number, the title, the collection and the
publication date; Double the simple display and the applicant and inventor names, the IPC code; Image will display only images, Multi-columns will display the different language version of the abstract available, Images can be also made visible for example

E Buttons to move through the result list

F Download button to download the result list (for logged-in users)

G Machine translation button to translate the result page in different languages

H RSS notifications for the search query to monitor patenting activity and updates in area of interest

I Query tree shows the breakdown of the results

**QUERY TREE**

- The graph button gives access to statistics
Filters show the statistics in a table format; Charts show the same information in a graph format, either bar or pie and Timeseries show the statistics over time.
The charts can be saved in GIF format for inclusion in documents or reports by right clicking in a corner of the image and selecting “Copy image” or “Save image”.

The filters and number of items can be customized in the **Settings** menu, in the **Result** tab.

Click on Offices or Languages or Stemming or Single Family Member or Include NPL to open **Refine Options** to define the collections (Offices); Language (of search); Stemming active or inactive, the grouping of the results by family and the inclusion of non-patent literature in the result list:
The tabs

- **PCT Biblio. Data**: Refers generally to the various data appearing on the front page of a patent document or the corresponding applications and may comprise document identification data, domestic filing data, priority data, publication data, classification data, and other concise data relating to the technical content of the document;

- **Description**: Clear and concise explanation of known existing technologies related to the new invention and explanation of how this invention could be applied to solve problems not addressed by the existing technologies; specific embodiments of the new technology are also usually given. Integrated machine translation tools allow translation of the document.

- **Claims**: Legal definition of the subject matter which the applicant regards as his invention and for which protection is sought or granted; each claim is a single sentence in a
legalistic form that defines an invention and its unique technical features; claims must be clear and concise and fully supported by the description. Integrated machine translation tools allow translation of the document.

- **Drawings**: gives direct access to the drawings of a patent document

- **ISR/WOSA/A17[2][a]**: gives access to the ISR/WOSA/Article 17(2)

- **National Phase**: Where information is displayed for an office, this indicates that the applicant has requested national phase processing for the application concerned in that office. The national entry date and national reference number are supplied by the national office concerned and can be used to retrieve further details from that office, if desired. A list of national patent offices supplying national phase information can be found here: [http://www.wipo.int/pctdb/en/nationalphase.jsp](http://www.wipo.int/pctdb/en/nationalphase.jsp).

- **Notices**: notifications of changes after publication

- **Documents**: This service provides access to published PCT international applications and to the latest bibliographic data and documents contained in the files of PCT international applications. Due to changes in the PCT Regulations and to the availability of documents in electronic form, the information available is different depending on the date of filing of the international application. WIPO bears no responsibility for the content of PCT international applications and related documents. The bibliographic data and documents are updated daily and publication of new applications is updated weekly on publication day, i.e., Thursday, unless the International Bureau is closed for a public holiday in which case data is published on Friday.

  In the **Settings** menu, in the **Result** tab, the **enable multi document download** can be activated for logged-in users in order to download one or more documents.

- **Patent Family**: family member information and timeline

- **Compounds**: will show the compounds and their location within the patent document
This translation tool is available for the translation of patent texts. Developed and trained internally on bilingual patent corpuses, it incorporates neural machine translation technology. It takes into account 32 technical domains derived from the IPC:

| ADMN | Admin, Business, Management & Soc Sci |
| AERO | Aeronautics & Aerospace Engineering |
| AGRI | Agriculture, Fisheries & Forestry |
| AUDV | Audio, Audiovisual, Image & Video Tech |
| AUTO | Automotive & Road Vehicle Engineering |
| BLDG | Civil Engineering & Building Construction |
| CHEM | Chemical & Materials Technology |
| DATA | Computer Sci, Telecom & Broadcasting |
| ELEC | Electrical Engineering & Electronics |
| ENGY | Energy, Fuels & Heat Transfer Eng |
| ENVR | Environmental & Safety Engineering |
| FOOD | Foods & Food Technology |
| GENR | Generalities, Language, Media & Info Sci |
| HOME | Home Contents & Household Maintenance |
| HORO | Precision Mechanics, Jewelry & Horology |
| MANU | Manufacturing & Materials Handling Tech |
| MARI | Marine Engineering |
| MEAS | Standards, Units, Metrology & Testing |
| MECH | Mechanical Engineering |
| MEDI | Medical Technology |
| METL | Metallurgy |
| MILI | Military Technology |
| MINE | Mining, Oil & Gas Extraction & Minerals |
| NANO | Nano Technology |
| PACK | Packaging & Distribution of Goods |
| PRNT | Printing & Paper |
| RAIL | Railway Engineering |
| SCIE | Optical Engineering |
| SPRT | Sports, Leisure, Tourism & Hospitality |
| TEXT | Textile & Clothing Industries |
| TRAN | Transportation |

18 language combinations are available:

- English-Chinese
- English-French
- English-German
- English-Italian
- English-Japanese
- English-Korean
- English-Russian
- English-Spanish
To use this tool:

A: Enter your text in the *Text to be translated* box;
B: Select the *Language pair*. The system will automatically detect the language pair to be used if you do not select an option;
C: Select the *Domain*. The system will automatically detect the domain if you do not select an option;
D: Click the *Translate* button.
The result will appear as shown below:

The tool splits the text into different segments, highlighted in red. For each segment, it suggests alternative translations. The user can also edit the proposed translations.

WIPO PEARL
WIPO’s multilingual terminology portal gives access to scientific and technical terms derived from patent documents. It helps promote accurate and consistent use of terms across different languages, and makes it easier to search and share scientific and technical knowledge.

Key features
- Developed by WIPO language experts and terminologists.
- 10 languages – Arabic, Chinese, English, French, German, Japanese, Korean, Portuguese, Russian and Spanish.
- All the content has been validated and given a term reliability score.
- If there is no equivalent in the target language in the database, WIPO’s machine translation engine may offer you a translation proposal.
- Integrated with PATENTSCOPE so you can search the entire PATENTSCOPE corpus for terms and their equivalents in other languages.

Linguistic search

Search by term, with optional parameters. Select a Source Language for best results, and disable ad-blocking plug-ins.


Concept map search

Search by concept, or by subject field/subfield by clicking on the bubbles; click on a concept to open the terminology record. Select a second concept to view the concept path, and click on the "Export concept path" button to perform a combined keyword search in.
IPC GREEN INVENTORY

The IPC Green Inventory attempts to collect Environmentally Sound Technologies (ESTs as listed by the United Nations Framework Convention on Climate Change (UNFCCC)) in one place as they are currently scattered widely across the IPC in numerous technical fields.

ESTs are presented in a hierarchical structure (A). For each technology, the links in the IPC column direct the user to the corresponding place in the scheme. The links in the PATENTSCOPE column (B) allow the user to automatically search and display all international patent applications available through PATENTSCOPE that are classified in the relevant IPC place.
PORTAL TO PATENT REGISTERS

The portal aims to facilitate the verification of legal status of patents and related SPCs by compiling relevant information of national registers of various jurisdictions, e.g. availability of online access to a national or regional register.
Query tab: Define the defaults for query language, the stemming option, the sorting of the results and the number of results to be included in the list.

The Office tab: Select the patent collection/s for your patent searches.
The Result tab: Define the defaults for the language of the result list, the fields that will be displayed, the presentation of the results analysis, the groups to be included in the results analysis and the number of items in those groups. It also gives access to the document downloading option:

![The Result tab](image1)

The Download tab: to enable the downloading of multiple documents, as well as to select the downloaded fields for the report

![The Download tab](image2)

The Interface tab: Select the default search interface and enable Google Translate. You can also select whether to activate Tooltip Help, Advanced Search Instant Help and IPC Help through this tab.

![The Interface tab](image3)
The *Others* tab allows you to subscribe to notifications

**NAVIGATION BAR**

In the Navigation bar, you will find:
- The Help menu
- The language of your interface
- The login menu
- The WIPO button to access the WIPO website

**HELP**

In the Help menu, are available:
- the latest news about PATENTSCOPE are posted
- guides on how to search, query syntax, field definition and country codes
- the data coverage
- the terms and conditions as well as the disclaimer
HELP

HOW TO SEARCH

- User's Guide
- PCT Families
- Query Syntax
- Claims Definitions
- IPC/OPS classification fields
- Wildcard vs Stemming
- Tutorials
- Webinars

PATENTSSCOPE NEWS

- National Collections of Finland and New Zealand now Available in Patentscope [Mar 16, 2021]
- Non-Patent Literature Now Available in PATENTSCOPE [Mar 2, 2021]
- New National Collections and Global Dossier Information Now Available in Patentscope [Dec 10, 2020]
- WIPO IP Portal: New MENU Features for PATENTSCOPE Users [Dec 7, 2020]

LATEST NEWSLETTER

» 08.02.2021 - [MPO webinar] 2 upcoming PATENTSCOPE webinars

DATA COVERAGE

- PCT applications
- PCT national phase entry
- National collections
- Global Dossier public
- Chemical documents
- Standard STN Authority Definition File

CODES

- INNO codes
- Kind codes
- Country Code

ABOUT

Version 1.4.5
LANGUAGES

The language of the interface can be selected from the drop-down menu English:

Or from your account once logged-in
LOGIN

Account Sign up
Provide the mandatory information (*) in order to create your free-of-charge PATENTSCOPE account.

Login
Once logged into the WIPO account, new icons will be available in the refine search box that will allow users to

1. Save their queries:

After clicking this icon (in the red rectangle above), users will be asked to give a name to their query in this dialog box
By default, your saved queries are *Private* that means that only you, when logged-in, can see them. You cannot share them or subscribe to the RSS feed.

If you would like to share your queries and use RSS feed you need to untick the *private Query* box and you will be able to share them and subscribe to RSS feed.

2. Download the result lists up to 10,000 records using the *Download* button above the result list. After clicking the icon, the downloading will automatically start and open an Excel sheet with either 1000 (simple icon) result or 10,000 (icon 10k).

3. Download one or more documents by selecting in the *Settings* menu, in the *Result* tab, the *enable multi document download* can be activated for logged-in users in order to download one or more documents.
4. Once logged-in, users will also have access to the chemical structure search in the *Search* menu, as well as Save their preferred settings, such as the search interface by default, the length of the search result list, etc. in the *Options* menu.
ANNEX

SEARCH SYNTAX

The search syntax allows you to search for specific information in the advanced search. A query is a logical sentence that consists of elements joined by special symbols called **operators** used to define the relationship between words or groups of words.

An “element” can be:
- a single term (“engine”);
- a phrase (a group of words surrounded by quotes to search for multiple words in exact order: “magnetic cup”); or
- several of these grouped together with parentheses.

List of operators supported in the PATENTSCOPE search service:

<table>
<thead>
<tr>
<th>Operators</th>
<th>Example</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOOLEAN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td>train AND plane</td>
<td>Returns all documents that contain both the first term and the second term.</td>
</tr>
<tr>
<td>OR</td>
<td>train OR plane</td>
<td>Returns all documents that contain either the first term or the second term or both.</td>
</tr>
<tr>
<td>NOT</td>
<td>NOT plane</td>
<td>Returns all documents that do not contain the term following NOT.</td>
</tr>
<tr>
<td>ANDNOT</td>
<td>train ANDNOT plane</td>
<td>Returns all documents that contain the first term and not the term following NOT.</td>
</tr>
<tr>
<td>WILDCARD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>?</td>
<td>te?t</td>
<td>Returns all documents that contain test or text. Wildcard search uses ? to search terms with one single character replaced. It is possible to use for example 2 ? to replace 2 characters</td>
</tr>
<tr>
<td>*</td>
<td>electr*e</td>
<td>Returns all documents that contain electric, electrics, electrical, electricity.</td>
</tr>
<tr>
<td></td>
<td>elec*try</td>
<td>Returns all documents that contain electricity. Wildcard search uses * to search terms with 0 or more characters replaced either in the middle of the term or at the end of the term (* as the 1st character of the term is not supported).</td>
</tr>
<tr>
<td>OTHERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>^</td>
<td>power^10 nuclear</td>
<td>Returns all documents in which “power” is considered to be more relevant (10 times in the example) than “nuclear”. The caret assigns importance values to individual query terms.</td>
</tr>
<tr>
<td>+/-</td>
<td>+electric-power</td>
<td>Returns all documents that contain electric and that do not contain power. Filtered searching allows to require (+) a query term and to prohibit (-) one.</td>
</tr>
<tr>
<td>~</td>
<td>roo~</td>
<td>Fuzzy search returns all documents that contain room, roof, root, etc.</td>
</tr>
<tr>
<td>( )</td>
<td>(spaghetti OR plate) AND fork</td>
<td>Returns all documents that contain spaghetti or plate and fork. Grouping is used to group clauses to form sub-queries.</td>
</tr>
<tr>
<td>~/NEAR</td>
<td>“heart monitoring”–10</td>
<td>Proximity search allows specifying a distance between words. In the example with tilde “heart” and</td>
</tr>
</tbody>
</table>
Heart NEAR monitoring “monitoring” are separated by 10 other words; NEAR separates words by 5 words by default

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
<td>[01.01.2000 TO 01.01.2001]</td>
<td>Returns all documents that contain dates between 01.01.2000 and 01.01.2001. Range search uses [ ] to include the bounds.</td>
</tr>
<tr>
<td>{ }</td>
<td>{Smith TO Townsend}</td>
<td>Returns all documents that contain names between Smith and Townsend, but not including Smith and Townsend. Range search uses { } to exclude the bounds.</td>
</tr>
</tbody>
</table>

FIELD CODES

Field codes are used in the Advanced Search interface to limit your search to specific fields. For example:

To search for documents that contain the terms “precipitated calcium carbonate”, “carbon dioxide”, and variants of the word inject (using a wildcard operator) in any English text and belong to the fields of technology of papermaking or cellulose production, as represented by the IPC subclass D21, you can use the query:

```
EN_ALLTXT:("precipitated calcium carbonate" AND "carbon dioxide" AND inject*) AND IC:D21
```

The EN_ALLTXT field code represents a combination of the English title, abstract, description, and claims fields, while the IC field code represents the International Patent Classification field. You should use parentheses (brackets) to enclose all search terms for a given field; and make sure not to put any spaces between the field code and the brackets!

The list of supported field codes in the PATENTSCOPE search service is available here: