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# THE PATENTSCOPE USER'S GUIDE

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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 and non-patent literature.

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 December 2023; 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 and non-patent literature, namely:

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

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

# WHAT IS THE DATA COVERAGE?

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/help/national\\_phase\\_entry.jsf](https://patentscope.wipo.int/search/en/help/national_phase_entry.jsf)

Please check our website, new collections become available on a regular basis. The collections available are listed in the *Simple Search/Advanced Search/Field Combination* page; click the arrow sign next to *Offices* to see the list.

The screenshot shows the PATENTSCOPE Simple Search interface. At the top, there is a message about patent documents and a search bar. Below the search bar is a dropdown menu labeled "Offices" with "All" selected. A red circle highlights the arrow icon to the right of "All", which is used to expand the list of offices. The expanded list includes categories like All, PCT, Africa, ARABPAT, Americas, LATIPAT, and specific countries such as Kenya, South Africa, Morocco, Chile, Cuba, El Salvador, Mexico, Peru, etc.



The *Offices* in *Simple Search* is only available for logged-in users. If you do not have a WIPO account to login-in, please see Login section of this Guide.

## 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](https://patentscope.wipo.int/search/en/help/data_coverage.jsf)

# WHAT IS THE DATA COVERAGE?

## NON-PATENT LITERATURE

The integration of non-patent literature (NPL) in PATENTSCOPE has open-access content from IEEE, Nature, Wikipedia (only technology and scientific content filtered using an in-house algorithm) and MDPI.

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

1. The *Advanced Search* and the *Field Combination* interfaces

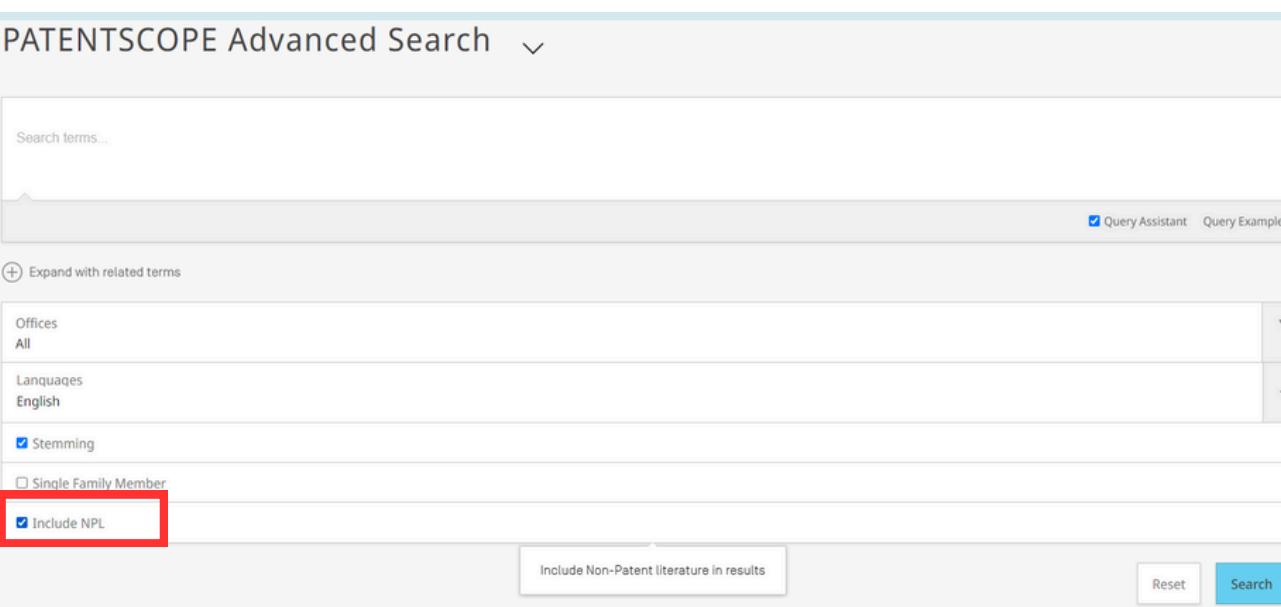
PATENTSCOPE Advanced Search ▾

Search terms...

Query Assistant    Query Example

(+) Expand with related terms

Offices All
Languages English
<input checked="" type="checkbox"/> Stemming
<input type="checkbox"/> Single Family Member
<input checked="" type="checkbox"/> Include NPL



PATENTSCOPE Field Combination ▾

	Field Front Page	Value
Operator AND	Field WIPO Publication Number	Value
Operator AND	Field Application Number	Value
Operator AND	Field Publication Date	Value
Operator AND	Field English Title	Value
Operator AND	Field All Classifications	IsEmpty: N/A
Operator AND	Field Licensing availability	<input type="checkbox"/>

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

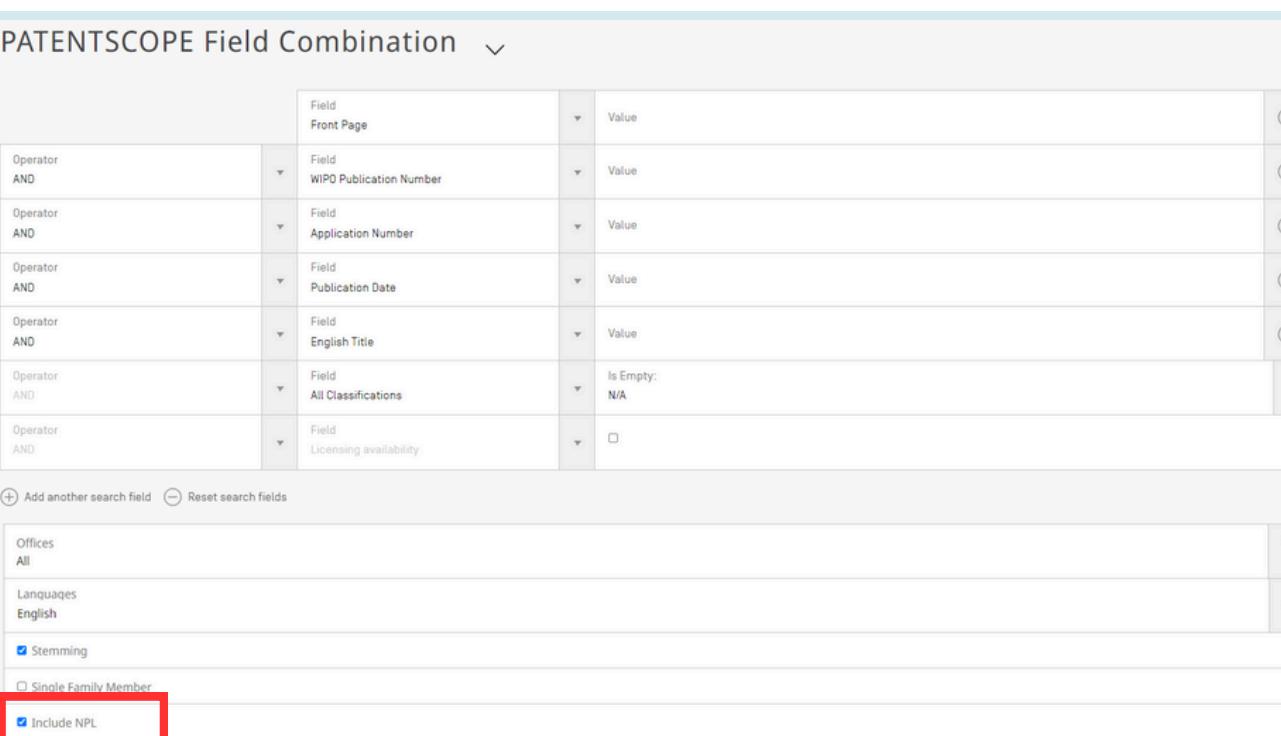
Offices  
All

Languages  
English

Stemming

Single Family Member

Include NPL



# WHAT IS THE DATA COVERAGE?

## NON-PATENT LITERATURE

2. The result list: the refine options is available by clicking on Include NPL

The screenshot shows a search results page for the query "FP:(car)". At the top, there are filters for Offices (All), Languages (English), Stemming (checked), Single Family Member (unchecked), and an "Include NPL" checkbox which is also unchecked and highlighted with a red box. Below this is a "Refine Options" dialog box containing the same filter settings. A red box highlights the "Include NPL" checkbox in the dialog box.

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

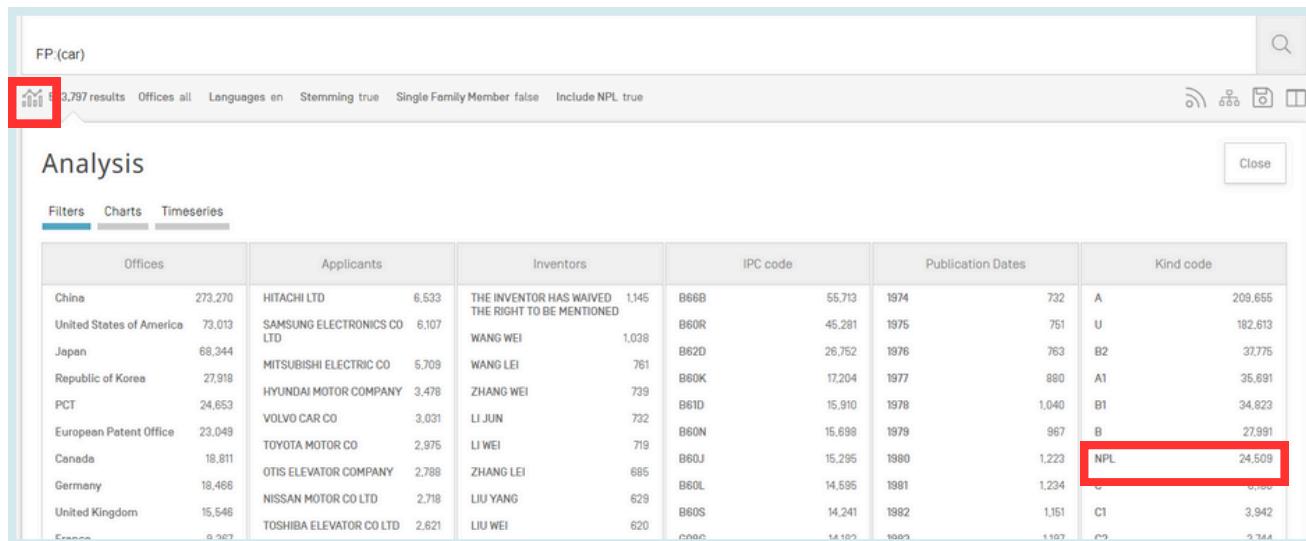
Useful fields to search the NPL content:

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

# WHAT IS THE DATA COVERAGE?

## NON-PATENT LITERATURE

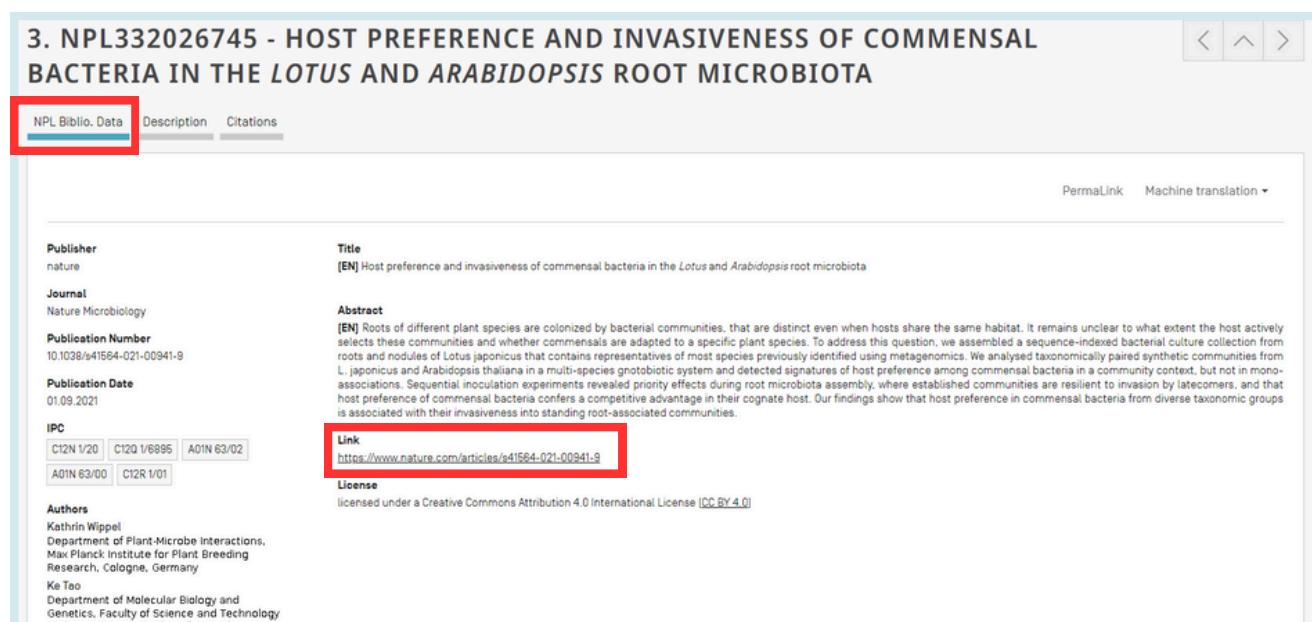
In the *Analysis* in the result list, NPL information is available in the *Kind code* column.



Offices	Applicants	Inventors	IPC code	Publication Dates	Kind code					
China	273,270	HITACHI LTD	6,533	THE INVENTOR HAS WAIVED THE RIGHT TO BE MENTIONED	B66B	55,713	1974	732	A	209,655
United States of America	73,013	SAMSUNG ELECTRONICS CO LTD	6,107	WANG WEI	B60R	45,281	1975	751	U	182,613
Japan	68,344	MITSUBISHI ELECTRIC CO LTD	5,709	WANG LEI	B62D	26,752	1976	763	B2	37,775
Republic of Korea	27,918	HYUNDAI MOTOR COMPANY	3,478	ZHANG WEI	B60K	17,204	1977	880	A1	35,691
PCT	24,653	VOLVO CAR CO	3,031	LI JUN	B61D	15,910	1978	1,040	B1	34,823
European Patent Office	22,049	TOYOTA MOTOR CO	2,975	LI WEI	B60N	15,698	1979	967	B	27,991
Canada	18,811	OTIS ELEVATOR COMPANY	2,788	ZHANG LEI	B60J	15,295	1980	1,223	NPL	24,509
Germany	18,466	NISSAN MOTOR CO LTD	2,718	LIU YANG	B60L	14,595	1981	1,234		
United Kingdom	15,546	TOSHIBA ELEVATOR CO LTD	2,621	LIU WEI	B60S	14,241	1982	1,181	C1	3,942
France	6,327				C06C	14,102	1983	1,107	C10	5,744

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:



**3. NPL332026745 - HOST PREFERENCE AND INVASIVENESS OF COMMENSAL BACTERIA IN THE LOTUS AND ARABIDOPSIS ROOT MICROBIOTA**

**NPL Biblio. Data** Description Citations PermaLink Machine translation ▾

**Publisher** nature

**Title** [EN] Host preference and invasiveness of commensal bacteria in the *Lotus* and *Arabidopsis* root microbiota

**Abstract** [EN] Roots of different plant species are colonized by bacterial communities, that are distinct even when hosts share the same habitat. It remains unclear to what extent the host actively selects these communities and whether commensals are adapted to a specific plant species. To address this question, we assembled a sequence-indexed bacterial culture collection from roots and nodules of *Lotus japonicus* that contains representatives of most species previously identified using metagenomics. We analysed taxonomically paired synthetic communities from *L. japonicus* and *Arabidopsis thaliana* in a multi-species guttobiotic system and detected signatures of host preference among commensal bacteria in a community context, but not in mono-associations. Sequential inoculation experiments revealed priority effects during root microbiota assembly, where established communities are resilient to invasion by latecomers, and that host preference of commensal bacteria confers a competitive advantage in their cognate host. Our findings show that host preference in commensal bacteria from diverse taxonomic groups is associated with their invasiveness into standing root-associated communities.

**Link** <https://www.nature.com/articles/s41564-021-00941-9>

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Ke Tao, Department of Molecular Biology and Genetics, Faculty of Science and Technology, Aarhus University, Aarhus, Denmark

# WHAT IS THE DATA COVERAGE?

## NON-PATENT LITERATURE

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:

3. NPL332026745 - HOST PREFERENCE AND INVASIVENESS OF COMMENSAL BACTERIA IN THE *LOTUS* AND *ARABIDOPSIS* ROOT MICROBIOTA

NPL Biblio. Data   **Description**   Citations

Note: Obtained from *nature*. Please see original document [here](#)  
licensed under a Creative Commons Attribution 4.0 International License ([CC BY 4.0](#))  
[EN]  
Roots of different plant species are colonized by bacterial communities, that are distinct even when hosts share the same habitat. It remains unclear to what extent the host actively selects these communities and whether commensals are adapted to a specific plant species. To address this question, we assembled a sequence-indexed bacterial culture collection from roots and nodules of *Lotus japonicus* that contains representatives of most species previously identified using metagenomics. We analysed taxonomically paired synthetic communities from *L. japonicus* and *Arabidopsis thaliana* in a multi-species gnotobiotic system and detected signatures of host preference among commensal bacteria in a community context, but not in mono-associations. Sequential inoculation experiments revealed priority effects during root microbiota assembly, where established communities are resilient to invasion by latecomers, and that host preference of commensal bacteria confers a competitive advantage in their cognate host. Our findings show that host preference in commensal bacteria from diverse taxonomic groups is associated with their invasiveness into standing root-associated communities.

Main

Plant roots associate with diverse microorganisms that are recruited from the surrounding soil biome and that assemble into structured communities known as the root microbiota. These communities provide the host with beneficial functions, such as indirect pathogen protection or mineral nutrient mobilization<sup>1,2</sup>. Despite conservation at higher taxonomic ranks<sup>3,4,5</sup>, comparison of community profiles across diverse land plants shows a clear separation according to host species<sup>6,7</sup>. These patterns could be explained by a process in which the root microbiota assemble according to niches defined by plant traits that in turn diversify as a result of plant adaptation to their environment. Alternatively, variation of microbiota profiles along the host rhizosphere may be at least partially caused by coordination between the plant and its associated microbial communities.

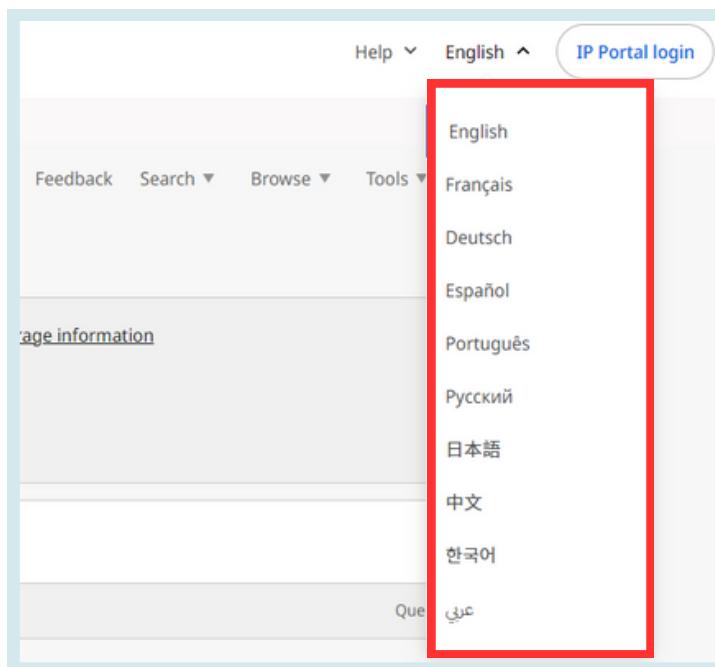
PermaLink   **Machine translation**

# SEARCH INTERFACES

## DIFFERENT LANGUAGES

### INTERFACE LANGUAGES

The search interface is available in 10 languages that can be selected in the navigation bar (white 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.

A screenshot of the PATENTSCOPE Simple Search interface. At the top, there is a header with 'PATENTSCOPE Simple Search', a 'Feedback' link, and a 'Search' dropdown menu. The 'Search' dropdown is open, showing five options: 'Simple', 'Advanced Search', 'Field Combination', 'Cross Lingual Expansion', and 'Chemical compounds [login required]'. The 'Simple' option is highlighted with a red circle. Below the search dropdown, there is a search bar with fields for 'Field' (set to 'Front Page') and 'Search terms...', and a magnifying glass icon. To the right of the search bar, there is a 'Settings' link and a 'Query Examples' link.

# SEARCH INTERFACES

## 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.

# SEARCH INTERFACES

## 1. SIMPLE SEARCH

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 under the *Browse* menu 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:

### PATENTSCOPE Simple Search

Using PATENTSCOPE you can search 114 million patent documents including 4.7 million published international patent applications (PCT). [Detailed coverage information](#)

PCT publication 49/2023 (07.12.2023) is now available [here](#). The next PCT publication 50/2023 is scheduled for 14.12.2023. [More](#)

Check out the [latest PATENTSCOPE news and features](#)

PATENTSCOPE Live Chat : every Monday from 1:00 PM to 5:00 PM CET

The screenshot shows the PATENTSCOPE Simple Search interface. At the top, there's a message about PCT publications and news. Below that, there are dropdown menus for 'Field' (set to 'Front Page') and 'Offices' (set to 'All'). A search bar contains the placeholder 'Search terms...'. To the right, a sidebar titled '[FP] Front Page' lists various search examples with checkboxes. A red box highlights the 'Query Examples' button at the bottom right of the sidebar.

[FP] Front Page	
The entered value is searched against the Title, Abstract, Numbers and Names	
<input checked="" type="checkbox"/> "electric car"~50 <input checked="" type="checkbox"/> Smith or Klein <input checked="" type="checkbox"/> WO2010000001 <input checked="" type="checkbox"/> EP2012001709 <input checked="" type="checkbox"/> "sol* panel"~5 <input checked="" type="checkbox"/> elect?icit? <input checked="" type="checkbox"/> electric^10 and car^3	
<b>Query Examples</b>	

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 button

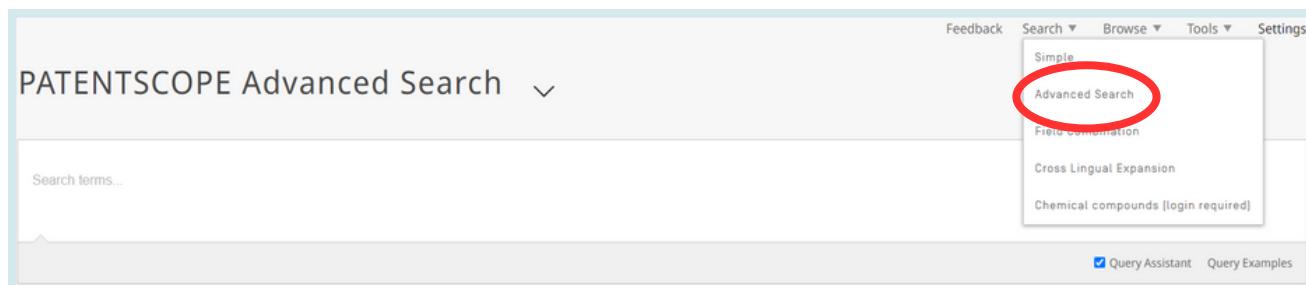


To look for a specific patent document number, use the *ID/Number* field.

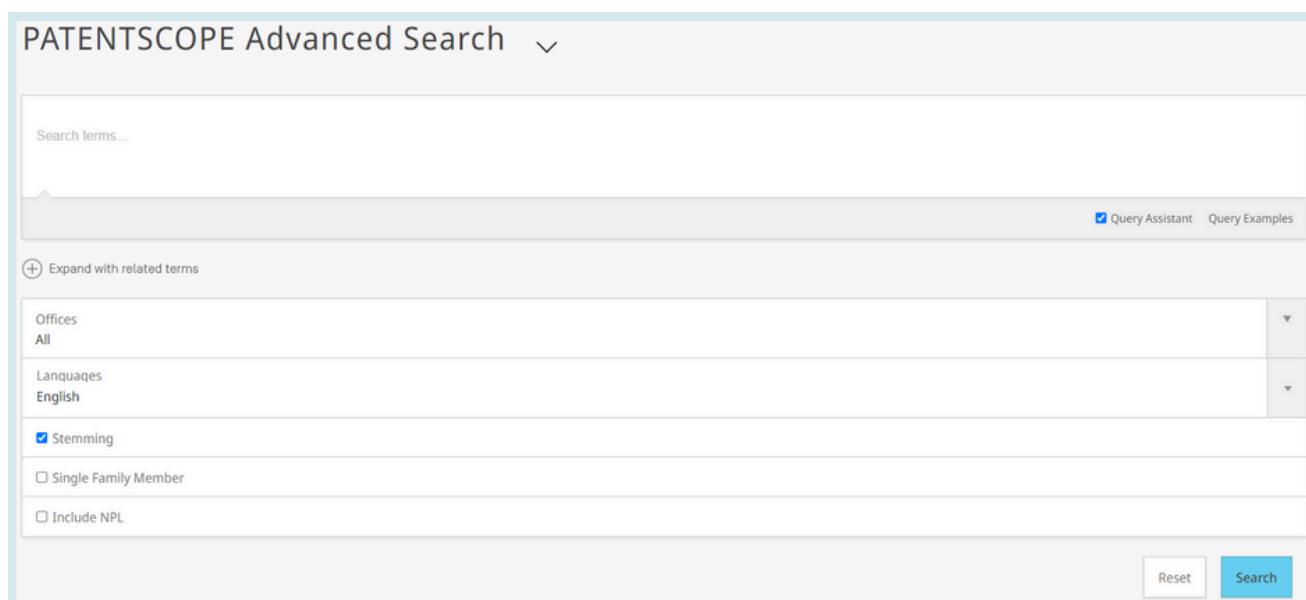
To look for any information related to a name (inventor, agent, etc.), use the *Names* field.

# SEARCH INTERFACES

## 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 wildcards:

- 50 wildcards/query max
- 10 wildcards/individual fields (EN\_ALLTXT for example) except:
  - EN\_ALL, FR\_ALL, DE\_AL ... 3 wildcards max
  - FR\_ALLTXT, DE\_ALLTXT... 5 wildcards max
- 2 wildcards/phrase max (EN\_TI:“elec\* car\* veh\*”)
- No leading wildcard (EN\_TI:“\*elec”)

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

# SEARCH INTERFACES

## 2. ADVANCED SEARCH

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 Annex 2 of this guide or at this link:

<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.

IN:(Jobs) AND DP:[2007 TO 2009] AND EN\_DE:(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:

cutting AND trunk

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



cutting NEAR5 trunk

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”:

“Field of the invention” BEFORE100 “surgical instruments”

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.

# SEARCH INTERFACES

## 2. ADVANCED SEARCH

To use the *Advanced Search* interface:

The screenshot shows the PATENTSCOPE Advanced Search interface. At the top, there is a search bar labeled "Search terms..." with a red number "1" next to it. Below the search bar is a dropdown menu labeled "Offices All" with a red number "2" next to it. Under "Offices", there is a "Languages English" section with a red number "3" next to it. A checked checkbox for "Stemming" is labeled with a red number "4". Below these, there are two unchecked checkboxes: "Single Family Member" (red number "5") and "Include NPL" (red number "6"). At the bottom right are "Reset" and "Search" buttons.

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.

# SEARCH INTERFACES

## 2. ADVANCED SEARCH

PATENTSCOPE Advanced Search ▾

Search terms...

Query Assistant  Query Examples

★

Offices  
All

Languages  
English

Stemming

Single Family Member

Include NPL

### 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.

Please enter a valid field... (or use UP/DOWN keys, and TAB or ENTER to select)  
autopilot

Query Assistant  Query Examples

Refresh

Expanded Query  
( ("automatic piloting" OR "automatic steering" OR "automatic driving" OR autopilot ) )

Then 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.

# SEARCH INTERFACES

## 3.FIELD COMBINATION

The screenshot shows the 'PATENTSCOPE Field Combination' interface. It features a search bar at the top with dropdown menus for 'Field' and 'Value'. Below the search bar, there are two search fields defined by an 'AND' operator. The first field is 'Field Front Page' and the second is 'Field WIPO Publication Number'. To the right of the search fields is a navigation menu with options like 'Feedback', 'Search', 'Browse', 'Tools', and 'Settings'. The 'Search' option is expanded, showing 'Simple', 'Advanced search', 'Field Combination' (which is circled in red), 'Cross Lingual Expansion', and 'Chemical compounds [login required]'. Help icons are located next to each menu item.

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 screenshot shows the 'PATENTSCOPE Field Combination' interface with a more complex search setup. It includes six search fields: 'Field Front Page', 'Field WIPO Publication Number', 'Field Application Number', 'Field Publication Date', 'Field English Title', and 'Field All Classifications' (set to 'IsEmpty: N/A'). Below the search fields are several search parameters: 'Offices' (set to 'All'), 'Languages' (set to 'English'), 'Stemming' (checked), 'Single Family Member' (unchecked), and 'Include NPL' (unchecked). At the bottom right are 'Reset' and 'Search' buttons.

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.

# SEARCH INTERFACES

## 3.FIELD COMBINATION

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.

The screenshot shows the 'PATENTSCOPE Field Combination' interface. It consists of a table with three rows. The first row has 'Operator AND' in the first column and 'Field Front Page' with 'Value' in the second column. The second row has 'Operator AND' in the first column and 'Field Applicant Name' with 'Value Shimano' in the second column. The third row has 'Operator AND' in the first column and 'Field Publication Date' with 'Value 2017' in the second column. The last two rows are highlighted with a red box.

PATENTSCOPE Field Combination	
Operator AND	Field Front Page
Operator AND	Field Applicant Name
Operator AND	Field Publication Date

- 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).

The screenshot shows the 'PATENTSCOPE Field Combination' interface. It consists of a table with three rows. The first row has 'Operator AND' in the first column and 'Field English Claims' with 'Value microchip' in the second column. The second row has 'Operator AND' in the first column and 'Field All Classifications' with 'IsEmpty: N/A' in the second column. The third row has 'Operator AND' in the first column and 'Field Licensing availability' with a checked checkbox in the second column. The last row is highlighted with a red box.

Operator AND	Field English Claims
Operator AND	Field All Classifications
Operator AND	Field Licensing availability

- 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.

The screenshot shows the 'PATENTSCOPE Field Combination' interface. It consists of a table with two rows. The first row has 'Operator AND' in the first column and 'Field International Class' with 'IsEmpty: Yes' in the second column. The second row has 'Operator AND' in the first column and 'Field Licensing availability' with a dropdown menu showing 'N/A', 'Yes', and 'No'. The 'Yes' option is highlighted with a blue background.

Operator AND	Field International Class
Operator AND	Field Licensing availability

# SEARCH INTERFACES

## 3.FIELD COMBINATION

PATENTSCOPE Field Combination ▾

Field	Front Page	Value	?
Operator AND	Field WIPO Publication Number	Value	?
Operator AND	Field Application Number	Value	?
Operator AND	Field Publication Date	Value	?
Operator AND	Field English Title	Value	?
Operator AND	Field All Classifications	IsEmpty: N/A	?
Operator AND	Field Licensing availability	<input type="checkbox"/>	?

(+) Add another search field (-) Reset search fields 3

Offices All 4	▼
Languages English 5	▼
<input checked="" type="checkbox"/> Stemming 6	▼
<input type="checkbox"/> Single Family Member 7	▼
<input type="checkbox"/> Include NPL 8	▼

9 559,410 result Reset Search

To use the *Field Combination* interface:

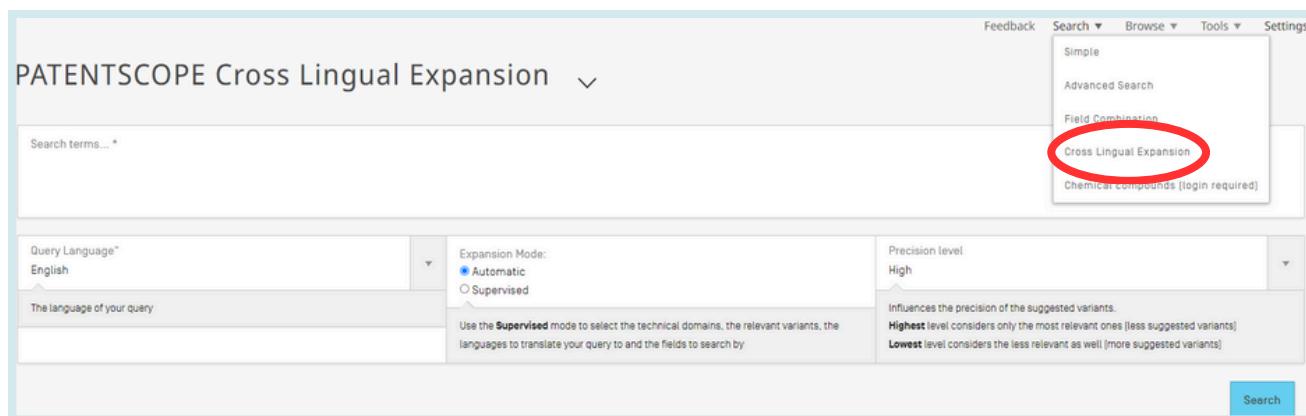
1. Select the field(s) of interest using the arrow of the drop-down menu;
2. Use the *AND/OR* boxes to add or include fields;
3. If you would like to add more fields or remove one or more fields, please click the + or - signs;
4. Select the collection/s you are interested in the drop-down menu;
5. Select the language in which you would like to perform the search in the drop-down;
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;
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;
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;
9. At the bottom of the search page, the number of results are indicated, allowing therefor to amend the query is necessary.



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

# SEARCH INTERFACES

## 4. CLIR (CROSS-LINGUAL INFORMATION RETRIEVAL)



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 language: 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.

# SEARCH INTERFACES

## 4. CLIR (CROSS-LINGUAL INFORMATION RETRIEVAL)

PATENTSCOPE Cross Lingual Expansion ▾

Search terms... \*

1

Query Language: English

2

Expansion Mode:

- Automatic
- Supervised

3

Precision level: High

4

Influences the precision of the suggested variants.  
Highest level considers only the most relevant ones (less suggested variants)  
Lowest level considers the less relevant as well (more suggested variants)

5

Search

To use the CLIR interface:

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*:
  - *Automatic* will generate the results immediately without any further user input.
  - *Supervised* will allow you to select the technical domain associated with your query and the variants relevant to your query.
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

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

Search terms... \*  
biodegradable cup

Query Language: English

Expansion Mode:

- Automatic
- Supervised

Precision level: High

Influences the precision of the suggested variants.  
Highest level considers only the most relevant ones (less suggested variants)  
Lowest level considers the less relevant as well (more suggested variants)

Search

# SEARCH INTERFACES

## **4. CLIR (CROSS-LINGUAL INFORMATION RETRIEVAL)**

The result list will be displayed with the new query containing synonms 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:

Search terms... *	biodegradable cup		
Query Language*	English	Expansion Mode:	<input type="radio"/> Automatic <input checked="" type="radio"/> Supervised
The language of your query	Use the <b>Supervised</b> mode to select the technical domains, the relevant variants, the languages to translate your query to and the fields to search by		
Precision level	High <small>Influences the precision of the suggested variants.  <b>Highest</b> level considers only the most relevant ones [less suggested variants]  <b>Lowest</b> level considers the less relevant as well [more suggested variants]         </small>		
	<a href="#">Select Domains</a>		

- 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;

Select one or more technical domains relevant to your search terms

Domains \*

Chemical & Materials Technology X  Manufacturing & Materials Handling Tech X  Packaging & Distribution of Goods X

Keep CTRL key pressed to select multiple domains from the list

[Start Over](#) [Back](#) [Expand Synonyms](#)

# SEARCH INTERFACES

## 4. CLIR (CROSS-LINGUAL INFORMATION RETRIEVAL)

- selecting relevant domains in the drop-down menu.

Select one or more technical domains relevant to your search terms

Domains \*

Chemical & Materials Technology X Manufacturing & Materials Handling Tech X Packaging & Distribution of Goods X

Admin, Business, Management & Soc Sci  
Aeronautics & Aerospace Engineering  
Agriculture, Fisheries & Forestry  
Audio, Audiovisual, Image & Video Tech  
Automotive & Road Vehicle Engineering

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.

Term 1: cup

Keep term untranslated when expanding query in other languages

Domains

Chemical & Materials Technology X Manufacturing & Materials Handling Tech X Packaging & Distribution of Goods X

Variants

Precision level  
High

<input type="checkbox"/> basin	<input type="checkbox"/> basket	<input type="checkbox"/> beaker
<input type="checkbox"/> bowl	<input type="checkbox"/> bucket	<input type="checkbox"/> container
<input type="checkbox"/> cuvette	<input type="checkbox"/> goblets	<input type="checkbox"/> mugs
<input type="checkbox"/> packed solid	<input type="checkbox"/> pan	<input type="checkbox"/> pit
<input type="checkbox"/> pockets	<input type="checkbox"/> ramming	<input type="checkbox"/> reservoir
<input type="checkbox"/> tank		

Add variant

Term 2: biodegradable

Start Over Back Translate Selected Terms

Please note that is necessary to check if each displayed variant applies otherwise you might have incomplete results.

Click on *Translate Selected Terms*.

# SEARCH INTERFACES

## 4. CLIR (CROSS-LINGUAL INFORMATION RETRIEVAL)

- Step 4: Check the proposed translations and define the fields in which the search should be performed.

The screenshot shows the search interface with various fields and options highlighted with red numbers:

- 1**: A red box highlights the "Remove this translation" button at the top right of the search terms input area.
- 2**: A red box highlights the "Field[s] you want to search:" dropdown menu, which contains "Abstract X".
- 3**: A red box highlights the "Acceptable distance between matched words:" dropdown menu, which contains "Sentence".
- 4**: A red box highlights the "Stemming" checkbox, which is checked.
- 5**: A red box highlights the "Search" button at the bottom right.

Search terms... \*  
"biodegradable cup"~21 OR "biodegradable container"~21 OR "biodegradable mugs"~21 OR "biodegradable bowl"~21

Field[s] you want to search: \* **2**

Acceptable distance between matched words: **3**

Stemming **4**

Remove this translation

Start Over Back Search **5**

- Check the translated terms by going in each tab. The *remove translation* button will remove language that the user is not interested in
- 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.
- 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.
- 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.
- Click on *Submit Query*. Results will be retrieved from the PATENTSCOPE search service and results will be displayed.

# SEARCH INTERFACES

## 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

The screenshot shows the WIPO PATENTSCOPE Simple Search interface. At the top right, there is a red circle around the "IP Portal login" button. Below it, a dropdown menu is open, with the "Chemical compounds [login required]" option also circled in red.

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

There are three options to perform a search.

This screenshot shows the "Convert structure" tab selected in the search interface. The search type is set to "Compound name". The search input field contains the placeholder text "Type an accepted name, commercial name, CAS name, IUPAC name". Below the input field are two checkboxes: "Search for scaffold" and "Include enumerated Markush structures". A dropdown menu for "Offices" is open, showing "All" as the selected option. At the bottom right are "Reset", "Show in editor", and "Exact Structure Search" buttons.

### ***CONVERT STRUCTURE TAB***

*Convert a structure* allows users to select the input type of the search such as the name of the chemical compound.

This screenshot shows the "Convert structure" tab with the "SMILES" option selected in the "Search type" dropdown menu. The input field still displays "Type an accepted name, commercial name, CAS name, IUPAC name". The "Exact Structure Search" button is highlighted in blue at the bottom right.

# SEARCH INTERFACES

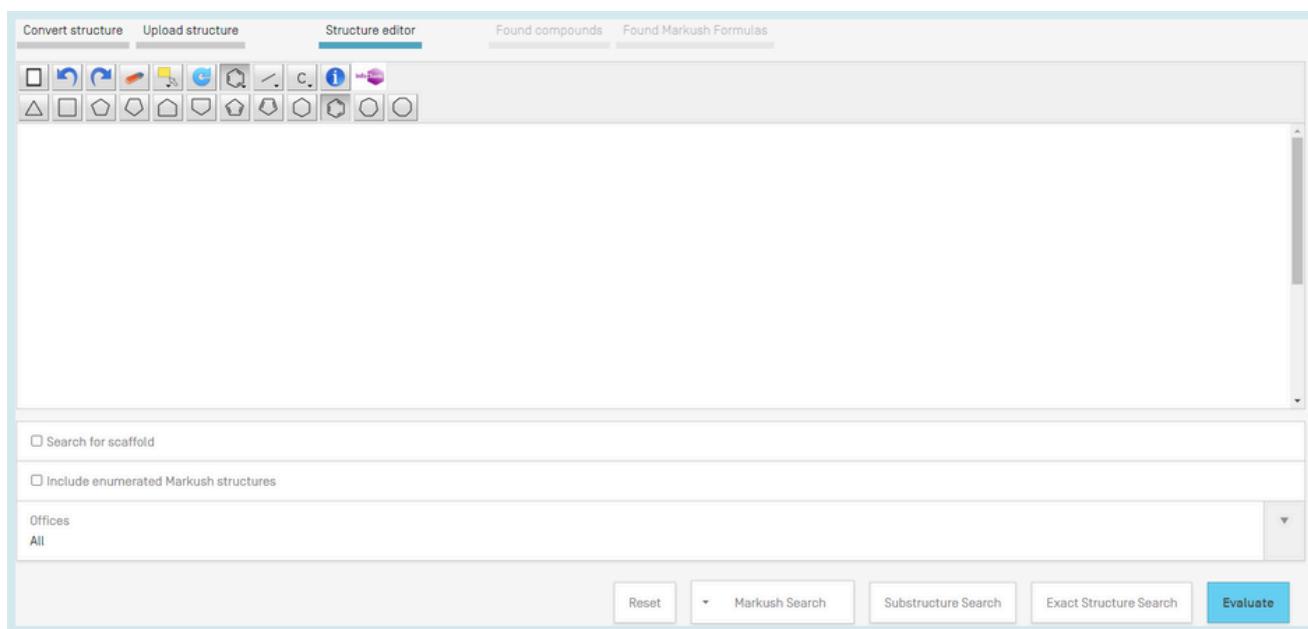
## 5.CHEMICAL STRUCTURE SEARCH

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.



To save a chemical structure that you drew in the Editor, first select *Evaluate*, then use the download button available below the drawing pad to download the mol file.

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

The screenshot shows the 'Chemical Structure Search' interface. At the top, there are tabs for 'Convert structure', 'Upload structure', 'Structure editor' (which is selected), 'Found compounds', and 'Found Markush Formulas'. Below the tabs is a toolbar with various chemical structure drawing tools. In the main workspace, a chemical structure of 4-acetylphenyl acetate is drawn. Below the workspace, the InChI, InChiKey, Molecular Formula, and Molecular Weight are displayed: InChI: InChI=1S/C9H8O4/c1-6[10]13-8-5-3-2-4-7[8]9[11]12/h2-5H,1H3,[H,11,12]; InChiKey: BSYNRYUMUTXBXSQ-UHFFFAOYSA-N; Molecular Formula: C9H8O4; Molecular Weight: 180.1598 g/mol. A red circle highlights the 'Save' icon (a disk symbol) in the bottom right corner of the workspace area.

Save the file and to upload the structure again, use the *upload structure* tab and select the file in question.

### **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 Structure editor tab

The screenshot shows the 'Chemical Structure Search' interface with the 'Upload structure' tab selected. The top navigation bar includes 'Convert structure', 'Upload structure' (selected), 'Structure editor', 'Found compounds', and 'Found Markush Formulas'. Below the tabs is a message: 'Select a structure file [MOL] or image file [PNG, GIF, TIFF, JPEG] and upload it.' To the right of this message is an 'Upload' button. At the bottom right of the interface is a 'Reset' button.

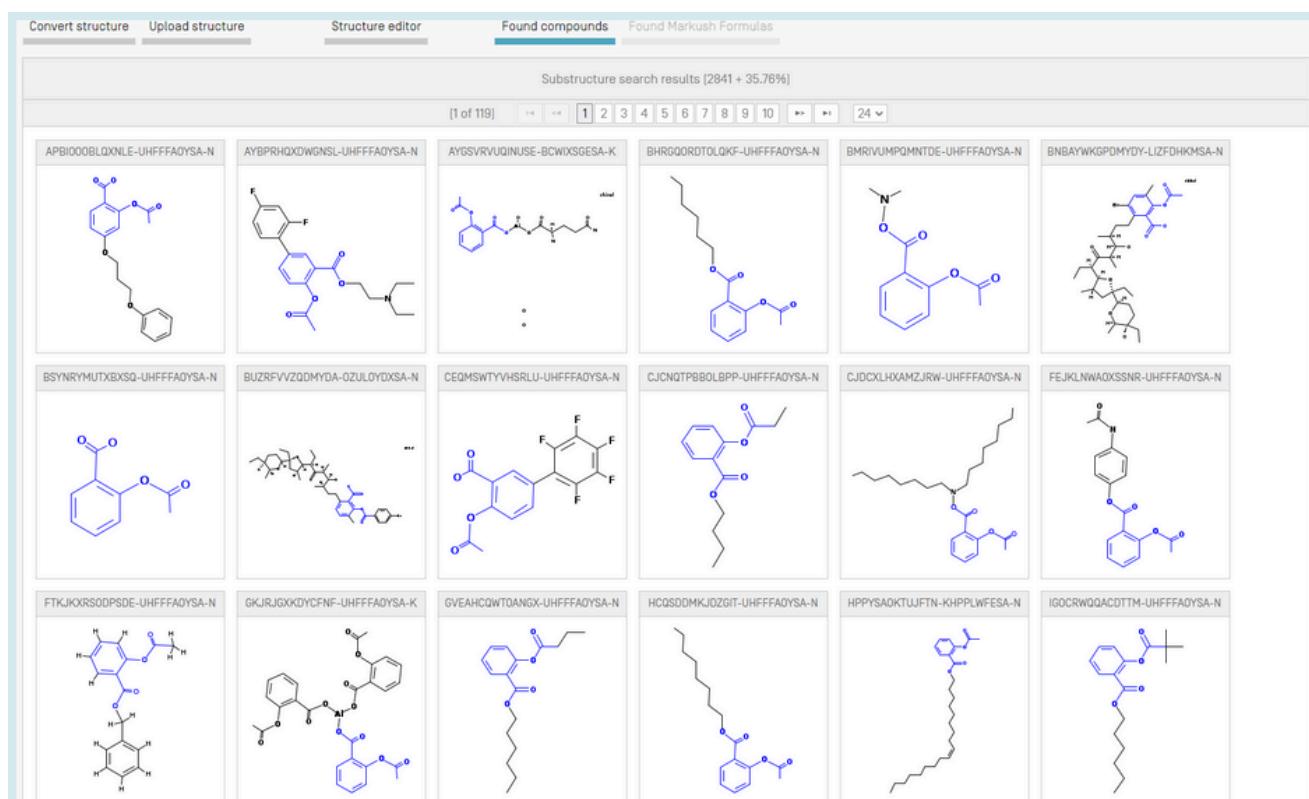
# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

### 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*.

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.



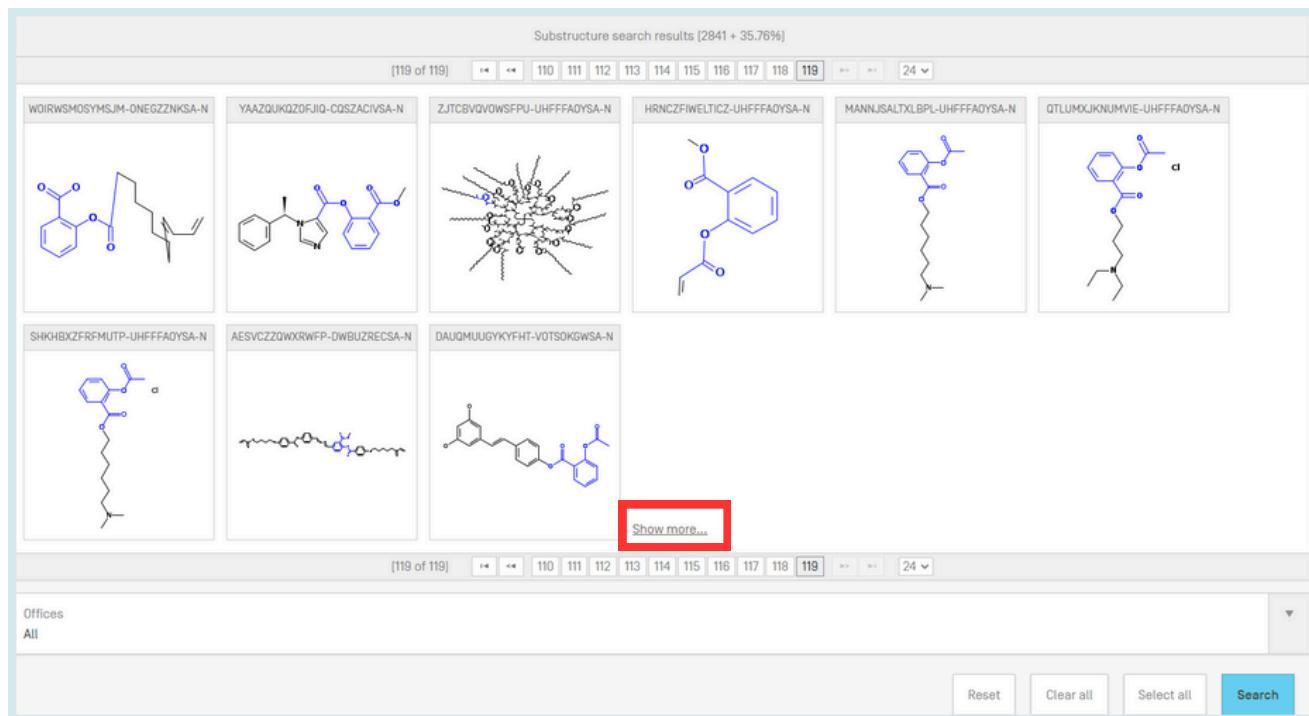
# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

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.

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

1. 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:

PATENTSCOPE Chemical compounds search ▾

Convert structure Upload structure Structure editor Found compounds Found Markush Formulas

Search type Compound name Type an accepted name, commercial name, CAS name, IUPAC name

Search for scaffold

**Include enumerated Markush structures**

Offices All

Reset Show in editor **Exact Structure Search**

The results are displayed as follows:

Note the new PATENTSCOPE search field ENUM that is used to index the enumerated InchiKeys.

CHEM:(BSYNRYMUTBXSQ-UHFFFAOYSA-N) OR ENUM:(BSYNRYMUTBXSQ-UHFFFAOYSA-N)

225,311 results Offices all Languages en Stemming true Single Family Member false Include NPL false

Sort: Relevance ▾ Per page: 10 ▾ View: All ▾ 1 / 22,532 ▾ Download ▾ Machine translation ▾

1. **1019980703434** 수분활성을조절한젤라틴캡슐제 KR - 05.11.1998  
Int.Class A61J 3/07 Ⓜ Appl.No 1019970706838 Applicant 시오노요시히코시오노기세이아루가부시카이사 Inventor 스즈키 유스케  
카복시에틸셀룰로즈칼슘, 크로스카르네이트, 부분젤라틴화전분 및 폴리비닐폴리피롤리온으로 이루어진 그룹에서 선택된 첨가제가 젤라틴캡슐의 젤라틴전증량에 대하여 50 내지 150중량%의 비율로 젤라린캡슐내에 충전되어 있는 수분활성을조절하고 밀폐계에서 보존시킨 젤라린캡슐제.

2. **0818195** GELATIN CAPSULE WITH ADJUSTED WATER ACTIVITY EP - 14.01.1998  
Int.Class A61K 9/48 Ⓜ Appl.No 98194198.7 Applicant SHIONOGI & CO Inventor SUZUKI YUSUKE  
A gelatin capsule having adjusted water activity and preserved in a closed system, which contains, packed therein, an additive(s) selected from carboxymethyl cellulose calcium, crosscarmellose sodium, partially gelatinized starch and polyvinylpyrrolidone in the proportion of 50 to 150 wt. % of the total quantity of the gelatin of the said capsule.

3. **1202102** GELATIN CAPSULE WITH ADJUSTED WATER ACTIVITY CN - 16.12.1998  
Int.Class A61K 3/07 Ⓜ Appl.No 98194198.7 Applicant Shionogi & Co., Ltd. Inventor Suzuki Yusuke  
A gelatin capsule having adjusted water activity and preserved in a closed system, which contains, packed therein, an additive(s) selected from the group consisting of carboxymethylcellulose calcium, crosscarmellose sodium, partially gelatinized starch and polyvinylpyrrolidone in a proportion of 50-150 wt. % of the total quantity of the gelatin.

4. **1995502521** 抗血栓治療および癌の予防のためのアセチルサリチル酸を含有する経皮適用系 JP - 16.03.1995  
Int.Class A61K 31/80 Ⓜ Appl.No 1993511405 Applicant エルティーエス・ローマン・テラビージュステーム・ゲゼルシャフト・ミット・ベシュレンクテル・ハフツング・ウント・コンパニー・ヨマンジットゲゼルシャフト  
Inventor ベヒャー, フランク

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

The advantages of the Markush search by enumerations are:

1. Simplicity: you only need to tick a box to search Markush Formulae
2. Response times: the search is executed in a matter of seconds
3. 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:

1. 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.
  2. Only exact compound searches can be conducted
2. 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:

The screenshot shows the PATENTSCOPE Chemical compounds search interface. At the top, there are tabs for 'Convert structure', 'Upload structure', 'Structure editor' (which is currently selected), 'Found compounds', and 'Found Markush Formulas'. Below these tabs, there is a search bar labeled 'Search type' with 'Compound name' selected. The search term 'lansoprazole' is entered into the search bar. Underneath the search bar are two checkboxes: 'Search for scaffold' and 'Include enumerated Markush structures'. A dropdown menu for 'Offices' is set to 'All'. At the bottom right of the search form are three buttons: 'Reset', 'Show in editor' (which is highlighted with a red box), and 'Exact Structure Search'.

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 two different search types, see below:

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

The screenshot shows the 'Chemical Structure Search' interface. At the top, there are tabs for 'Convert structure', 'Upload structure', 'Structure editor' (which is selected), 'Found compounds', and 'Found Markush Formulas'. Below the tabs is a toolbar with various chemical structure drawing tools. A complex organic molecule is drawn in the main workspace. Below the workspace, the molecule's InChI, InChiKey, Molecular Formula, and Molecular Weight are displayed: InChI: InChI=1S/C16H14F3N3O2S/c1-10-13[20-7-6-14[10]24-9-16[17,18]19]8-25[23]15-21-11-4-2-3-5-12[11]22-15/h2-7H,8-9H2,1H3,[H,21,22]; InChiKey: MJIHNNLFOKEZEW-UHFFFAOYSA-N; Molecular Formula: C16H14F3N3O2S; Molecular Weight: 369.3664 g/mol. There are checkboxes for 'Search for scaffold' and 'Include enumerated Markush structures'. A dropdown menu for 'Offices' is set to 'All'. At the bottom, there are buttons for 'Reset', 'Markush Search' (with a dropdown arrow), 'Substructure Search', 'Exact Structure Search', and 'Evaluate'. The 'Substructure Search' and 'Exact Search' buttons are highlighted with a red box.

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

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:

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

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:

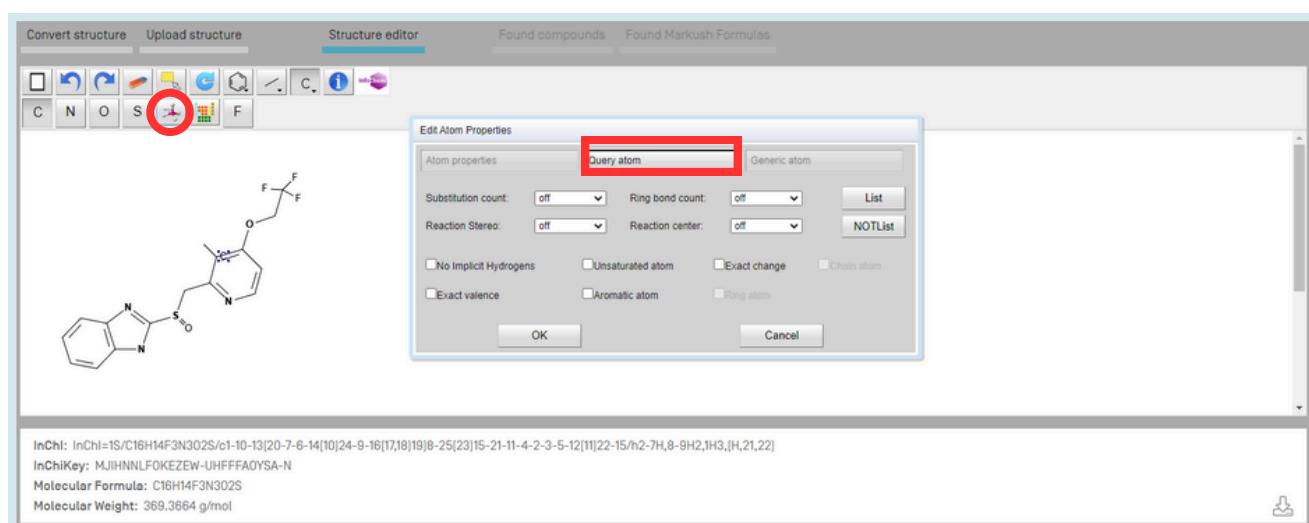
The MN search field also allows you to search directly if you already have one or more Clarivate Markush numbers to search.

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE 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 ie. in a chemical structure with  $-(CH_2)_n-$  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

# SEARCH INTERFACES

## 5.CHEMICAL STRUCTURE SEARCH

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.

National Biblio. Data Description Claims Patent Family Compounds **Markush** Documents PermaLink

Markush Nr.: 9117-08201

▼ Markush formula

1. EP0423748 - STABILIZED PHARMACEUTICAL COMPOSITION AND ITS PRODUCTION.

National Biblio. Data Description Claims Patent Family Compounds **Markush** Documents PermaLink

Markush Nr.: 9117-08201

▼ Markush formula  
+ Enumerated compounds

Note: These structures have been created automatically. Please use the original Markush definition in the PDF version for legal matters.

HBOKFZNDMVLSHM-UHFFFAOYSA-N	ZFUVBCOUKXFRIQ-UHFFFAOYSA-N	KXTURBGWONUWQV-UHFFFAOYSA-N	DBYANRPWQTZDQ-UHFFFAOYSA-N	MSVPDUIRKKWSDW-UHFFFAOYSA-N
YNRXQBPXU/VQIHBZ-UHFFFAOYSA-N	ZIMGHBUTEIXAO-UHFFFAOYSA-N	DOHZADTQJZDEU-UHFFFAOYSA-N	FVCDIYKMQQKRIF-UHFFFAOYSA-N	EYV9HQLRLOZYDQ-UHFFFAOYSA-N
BPH000WDRRIHBC-UHFFFAOYSA-N	CBMRXESKQZZXPS-UHFFFAOYSA-N			

# FAMILIES IN PATENTSCOPE

## DEFINITION

PATENTSCOPE Patent Families denominate 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:

- A PCT patent application (IC1);
- Its national entries either
  - reported as national entries by the participating offices prior to their publication (IC2 or IC3) or
  - after publication as part of the bibliographic data, International Convention data other than Paris Convention (IC2); and
- Its priority application if first and only priority (IC5);

The PCT families can further be enriched by adding:

- 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
- Any applications that have not followed the PCT route but share the same priorities as the members of the PCT family.

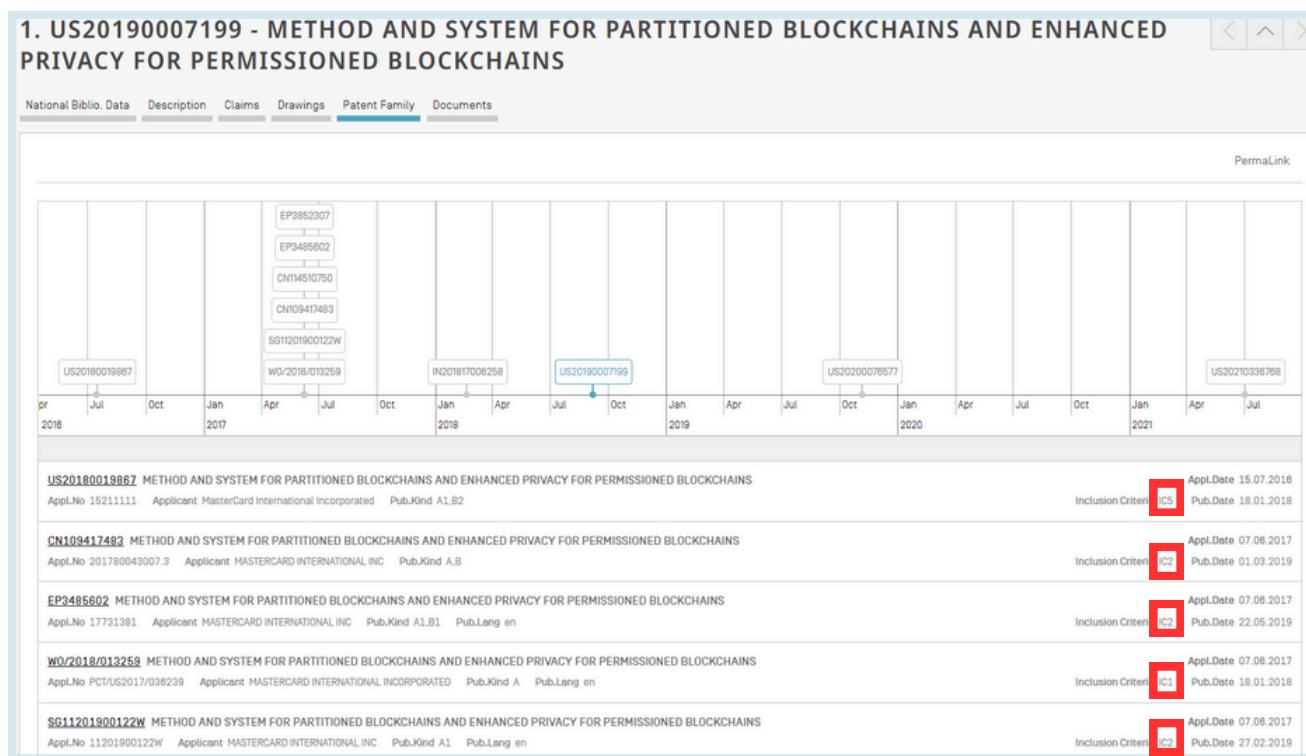
Further to this, the Paris route subset of the PATENTSCOPE Patent Families include:

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:

# FAMILIES IN PATENTSCOPE

## DEFINITION



## IC CODES

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

# FAMILIES IN PATENTSCOPE

## IC CODES

When hovering the cursor over the code, a window will pop up with the definition of the code in question:

US20180019867 METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS Appl.No 15211111 Applicant MasterCard International Incorporated Pub.Kind A1,B2	Appl.Date 15.07.2018 Inclusion Criteria IC5 Pub.Date 18.01.2018
CN109417483 METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS Appl.No 201780043007.3 Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A,B	Sole priority inside the family. 2017 Inclusion Criteria IC2 Pub.Date 01.03.2019

- IC1: Published PCT application = origin of the family + information in the *National Phase* tab

National Biblio. Data Description Claims Drawings Patent Family Documents																					
PermaLink																					
pr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul	Oct	Jan	Apr	Jul
2016	2017	2018	2019	2020	2021																

US20180019867 METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS  
Appl.No 15211111 Applicant MasterCard International Incorporated Pub.Kind A1,B2

CN109417483 METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS  
Appl.No 201780043007.3 Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A,B

EP3485602 METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS  
Appl.No 17731381 Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A1,B1 Pub.Lang en

WO/2018/013259 METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS  
Appl.No PCT/US2017/038239 Applicant MASTERCARD INTERNATIONAL INCORPORATED Pub.Kind A Pub.Lang en

### 1. WO2018013259 - METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS

PCT Biblio. Data Description Claims Drawings ISR/WOSA/A17(2)(a) National Phase Patent Family Notices Documents					
PermaLink					
Available information on National Phase entries <a href="#">[more information]</a>					
Office	Entry Date	National Number		National Status	
Singapore	07.01.2019	11201900122W		Published 28.02.2023 Granted 28.02.2023	
China	10.01.2019	201780043007.3		Published 01.03.2019 Granted 12.04.2022	
European Patent Office	15.02.2019	2017731381		Granted 24.03.2021	

- IC2: National entry of a published PCT application:
  - Visible in the *National Phase* tab; or
  - If not visible in the *National Phase* tab, relationship to the PCT is built from the regional filling or publication information of the bibliographic data

# FAMILIES IN PATENTSCOPE

## IC CODES

<a href="#">US20180019887</a> METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 15.07.2018
Appl.No 15211111 Applicant MasterCard International Incorporated Pub.Kind A1,B2	Inclusion Criteria IC5 Pub.Date 18.01.2018
<a href="#">CN109417483</a> METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 07.08.2017
Appl.No 201780043007.3 Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A,B	Inclusion Criteria IC2 Pub.Date 01.03.2019
<a href="#">EP3485802</a> METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 07.08.2017
Appl.No 17731381 Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A1,B1 Pub.Lang en	Inclusion Criteria IC2 Pub.Date 22.05.2019
<a href="#">WO/2018/013259</a> METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 07.08.2017
Appl.No PCT/US2017/038239 Applicant MASTERCARD INTERNATIONAL INCORPORATED Pub.Kind A Pub.Lang en	Inclusion Criteria IC1 Pub.Date 18.01.2018
<a href="#">SG11201900122W</a> METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 07.08.2017
Appl.No 11201900122W Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A1 Pub.Lang en	Inclusion Criteria IC2 Pub.Date 27.02.2019
<a href="#">EP3852307</a> METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 07.08.2017
Appl.No 21181474 Applicant MASTERCARD INTERNATIONAL INC Pub.Kind A1 Pub.Lang en	Inclusion Criteria IC6 Pub.Date 21.07.2021
<a href="#">CN114510750</a> METHOD AND SYSTEM FOR GENERATING BLOCKS OF PARTITIONED BLOCK CHAIN	Appl.Date 07.08.2017
Appl.No 202210127277.1 Applicant WANDA CARD INTERNATIONAL STORE CO., LTD Pub.Kind A	Inclusion Criteria IC8 Pub.Date 17.05.2022
<a href="#">IN201817006258</a> METHOD AND SYSTEM FOR PARTIMETHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS	Appl.Date 19.02.2018
Appl.No 201817006258 Applicant MASTERCARD INTERNATIONAL INCORPORATED Pub.Kind A Pub.Lang en	Inclusion Criteria IC2 Pub.Date 22.08.2018

Example of information available in the *National Phase* tab of PATENTSCOPE:

**1. WO2018013259 - METHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS**

PCT Biblio. Data	Description	Claims	Drawings	ISR/WOSA/A17[2][a]	National Phase	Patent Family	Notices	Documents
					National Phase			
PermaLink								
Available information on National Phase entries <a href="#">[more information]</a>								
Office	Entry Date	National Number		National Status				
Singapore	07.01.2019	11201900122W		Published 28.02.2023 Granted 28.02.2023				
China	10.01.2019	201780043007.3		Published 01.03.2019 Granted 12.04.2022				
European Patent Office	15.02.2019	2017731381		Granted 24.03.2021				

Example of information taken from the bibliographic data:

**1. IN201817006258 - METHOD AND SYSTEM FOR PARTIMETHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINSTIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS**

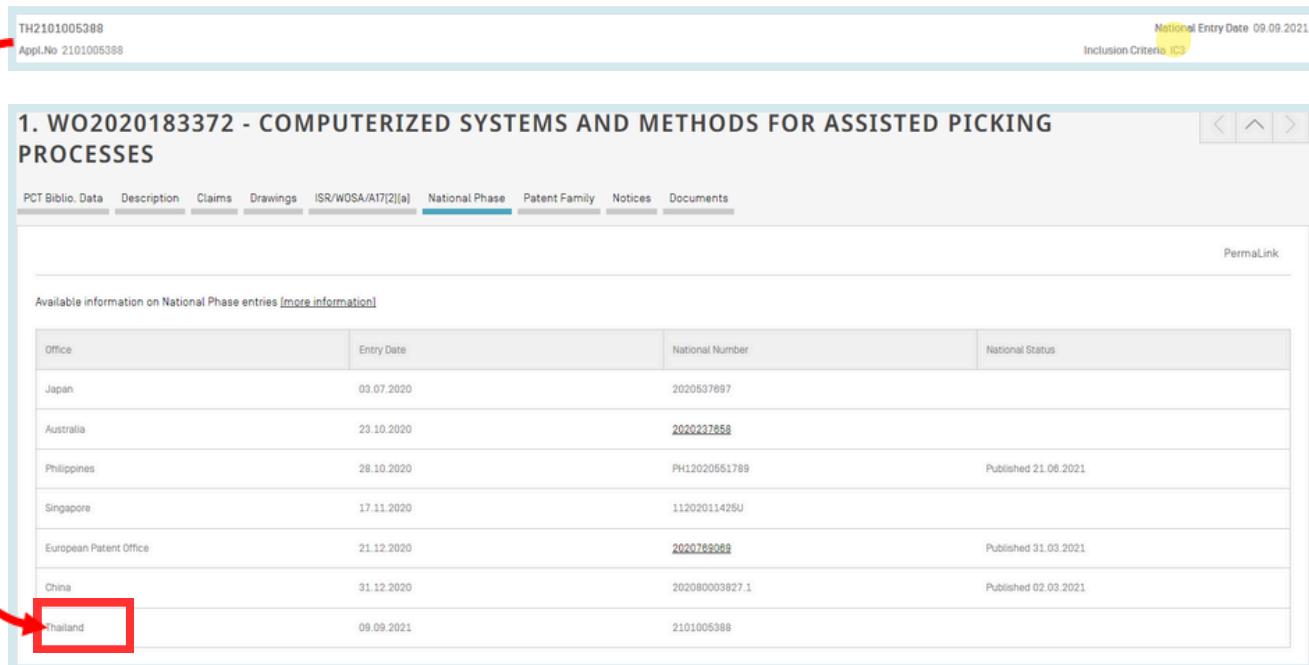
National Biblio. Data	Description	Claims	Patent Family	Documents
National Biblio. Data				
PermaLink Machine translation ▾				
<b>Title</b> India	<b>Title</b> [EN] METHOD AND SYSTEM FOR PARTIMETHOD AND SYSTEM FOR PARTITIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINSTIONED BLOCKCHAINS AND ENHANCED PRIVACY FOR PERMISSIONED BLOCKCHAINS			
<b>Application Number</b> 201817006258	<b>Abstract</b> [EN] A method for generation of blocks for a partitioned blockchain includes: storing blocks comprising a partitioned blockchain, wherein each block includes a header and transaction entries; receiving transaction data entries for each of a plurality of subnets; generating a hash value of the header included in the most recently added block; generating a new block header, the new block header including the generated hash value, a timestamp, and a sequence of pairs including a pair for each of the plurality of subnets, each pair including a subnet identifier associated with the respective subnet and a merkle root of each of the transaction data entries received for the respective subnet; generating a new block, the new block including the generated new block header and the transaction data entries for each of the plurality of subnets; and transmitting the new block to a plurality of nodes associated with the partitioned blockchain.			
<b>Publication Date</b> 19.02.2018				
<b>Publication Number</b> 201817006258	<b>Related patent documents</b> <a href="#">US20180019887</a> <a href="#">CN109417483</a> <a href="#">EP3485802</a> <a href="#">WO/2018/013259</a> <a href="#">SG11201900122W</a> <a href="#">EP3852307</a> <a href="#">CN114510750</a> <a href="#">US20190007199</a> <a href="#">US20200078577</a> <a href="#">US20210336768</a>			

For the Indian 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.

# FAMILIES IN PATENTSCOPE

## IC CODES

- IC3: National entry of a published PCT application not found in PATENTSCOPE



TH2101005388  
Appl.No 2101005388

National Entry Date 09.09.2021  
Inclusion Criteria IC3

**1. WO2020183372 - COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES**

PCT Biblio. Data Description Claims Drawings ISR/WOSA/A17[2][a] **National Phase** Patent Family Notices Documents

PermaLink

Available information on National Phase entries [more information]

Office	Entry Date	National Number	National Status
Japan	03.07.2020	2020537697	
Australia	23.10.2020	<a href="#">2020237858</a>	
Philippines	28.10.2020	PH12020551789	Published 21.06.2021
Singapore	17.11.2020	11202011425U	
European Patent Office	21.12.2020	<a href="#">2020769068</a>	Published 31.03.2021
China	31.12.2020	202080003827.1	Published 02.03.2021
Thailand	09.09.2021	2101005388	

The patent document in question is not available in PATENTSCOPE because the application entered the national phase in the relevant office but was 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.



AU2020104449 COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES  
Appl.No 2020104449 Applicant Coupang Corp. Pub.Kind A,A4

VN1/081505 COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES  
Appl.No 1202101271 Applicant COUPANG CORP. Pub.Kind A

**US20210039885 COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES**  
Appl.No 17082214 Applicant COUPANG CORP. Pub.Kind A1,B2

PH1/2020/551789 COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES  
Appl.No 1/2020/551789 Applicant COUPANG CORP. Pub.Kind A1 Pub.Lang en

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



**1. US20210039885 - COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES**

National Biblio. Data **Description** Claims Drawings Patent Family Documents

PermaLink Machine translation ▾

Note: Text based on automatic Optical Character Recognition processes. Please use the PDF version for legal matters  
[EN]

**CROSS-REFERENCE TO RELATED APPLICATIONS**

This application is a continuation of and claims the benefit of priority to U.S. application Ser. No. 18/808,080, filed Mar. 3, 2020 [now allowed], which is a continuation of and claims the benefit of priority to U.S. application Ser. No. 18/298,403 [now U.S. Pat. No. 10,618,735], filed Mar. 11, 2019. The contents of the above-noted applications are hereby incorporated by reference in their entirety.

# FAMILIES IN PATENTSCOPE

## FAMILY INFORMATION ACCESS

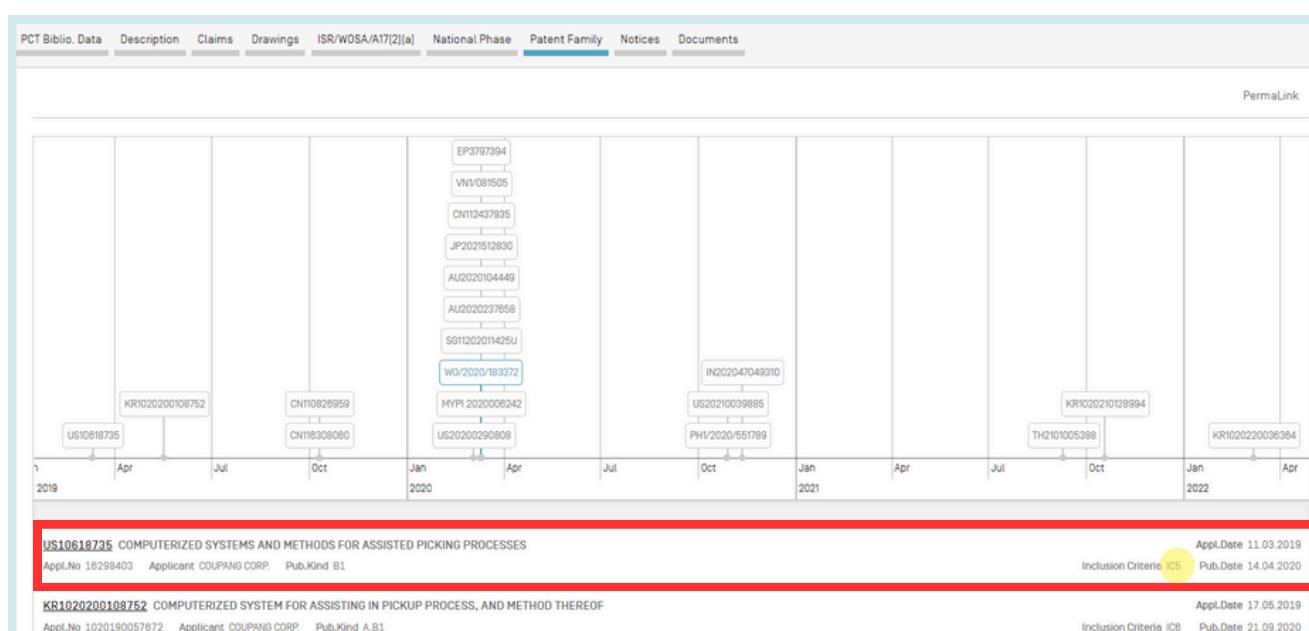
Example of the XML available in the *Documents* tab in PATENTSCOPE:

```

<us-related-documents>
  <continuation>
    <relation>
      <parent-doc>
        <document-id>
          <country>US</country>
          <doc-number>16808060</doc-number>
          <date>20200303</date>
        </document-id>
      <parent-grant-document>
        <document-id>
          <country>US</country>
          <doc-number>10870537</doc-number>
        </document-id>
      </parent-grant-document>
    </parent-doc>
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    </child-doc>
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</continuation>
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  <relation>
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      <document-id>
        <country>US</country>
        <doc-number>16298403</doc-number>
        <date>20190311</date>
      </document-id>
    </parent-doc>
  </relation>
</continuation>

```

- IC5: the application that is the sole priority of all members in the family



# FAMILIES IN PATENTSCOPE

## FAMILY INFORMATION ACCESS

- IC6: applications included in the family based on matching priorities

Screenshot of the PatentScope interface showing the family tree and priority chain for a patent application.

**Family Tree:**

```

    EP3797394
    +--> VNI081505
    +--> CN112437935
    +--> JP2021512930
    +--> AU2020104449
    +--> AU2020237658
    +--> SG11202011425U
    +--> WO/2020/183372
    +--> MY1 2020006242
    +--> US20200290808
    +--> KR1020200108752
    +--> CN110826959
    +--> CN116308060
    +--> KR1020200108752
    +--> KR10202010128994
    +--> TH2101005388
    +--> KR1022020036384
  
```

**Priority Chain:**

```

    US10618735 (Apr 2019) --> KR1020200108752 (Jul 2019)
    KR1020200108752 --> CN110826959 (Oct 2019)
    CN110826959 --> CN116308060 (Jan 2020)
    CN116308060 --> KR1020200108752 (Apr 2020)
    KR1020200108752 --> WO/2020/183372 (Apr 2020)
    WO/2020/183372 --> MY1 2020006242 (Apr 2020)
    MY1 2020006242 --> US20200290808 (Apr 2020)
    US20200290808 --> KR1020200108752 (Oct 2020)
    KR1020200108752 --> IN2020/47049310 (Jan 2021)
    IN2020/47049310 --> US20210039885 (Apr 2021)
    US20210039885 --> PH1/2020/551789 (Oct 2021)
    PH1/2020/551789 --> KR1020210128994 (Jan 2022)
    KR1020210128994 --> TH2101005388 (Apr 2022)
    TH2101005388 --> KR1022020036384 (Jan 2022)
  
```

**Patent Details:**

- US10618735 COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES**  
Appl.No 18298403 Applicant COUPANG CORP. Pub.Kind B1  
Appl.Date 11.03.2019 Inclusion Criteria IC5 Pub.Date 14.04.2020
- KR1020200108752 COMPUTERIZED SYSTEM FOR ASSISTING IN PICKUP PROCESS, AND METHOD THEREOF**  
Appl.No 1020190057872 Applicant COUPANG CORP. Pub.Kind A,B1  
Appl.Date 17.05.2019 Inclusion Criteria IC6 Pub.Date 21.09.2020

**1. KR1020200108752 - COMPUTERIZED SYSTEM FOR ASSISTING IN PICKUP PROCESS, AND METHOD THEREOF**

**Priority Data:** 1020190057872 (11.05.2019)

**1. CN116308060 - COMPUTERIZED SYSTEM AND METHOD FOR ASSISTING PICKING PROCESS**

**Priority Data:** 1020190057872 (11.05.2019)

**1. AU2020104449 - COMPUTERIZED SYSTEMS AND METHODS FOR ASSISTED PICKING PROCESSES**

**Priority Data:** 1020190057872 (11.05.2019)

# FAMILIES IN PATENTSCOPE

## FAMILY INFORMATION ACCESS

- 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.

1. NZ598255 - PASTURE DRAIN FORMING APPARATUS

National Biblio. Data Patent Family Documents

PermaLink

NZ594073	Aug	Sep	Oct	Nov	Dec	Jan	Feb
2011						2012	

**NZ594073 PASTURE DRAIN FORMING APPARATUS**  
Appl.No 594073 Applicant Peter Sutherland Pub.Kind B Pub.Lang en  
Appl.Date 14.07.2011 Inclusion Criteria IC7 Pub.Date 27.04.2012

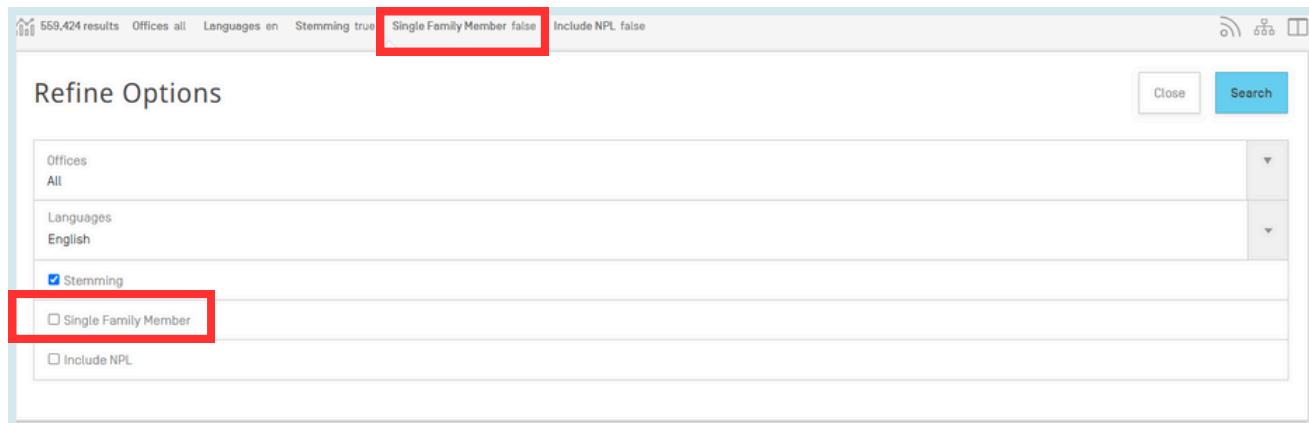
**NZ598255 PASTURE DRAIN FORMING APPARATUS**  
Appl.No 598255 Applicant PETER SUTHERLAND Pub.Kind A Pub.Lang en  
Appl.Date 16.02.2012 Inclusion Criteria IC7 Pub.Date 17.05.2013

# FAMILIES IN PATENTSCOPE

## GROUP RESULTS BY FAMILIES

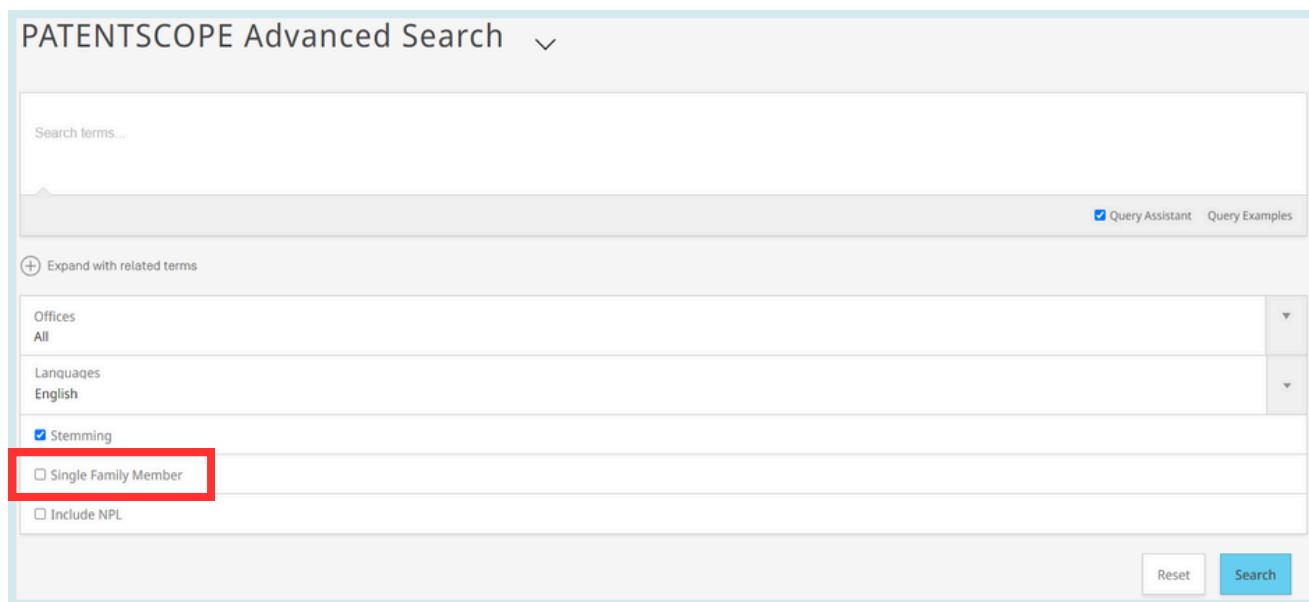
To use the *Single Family Member* option, go to:

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



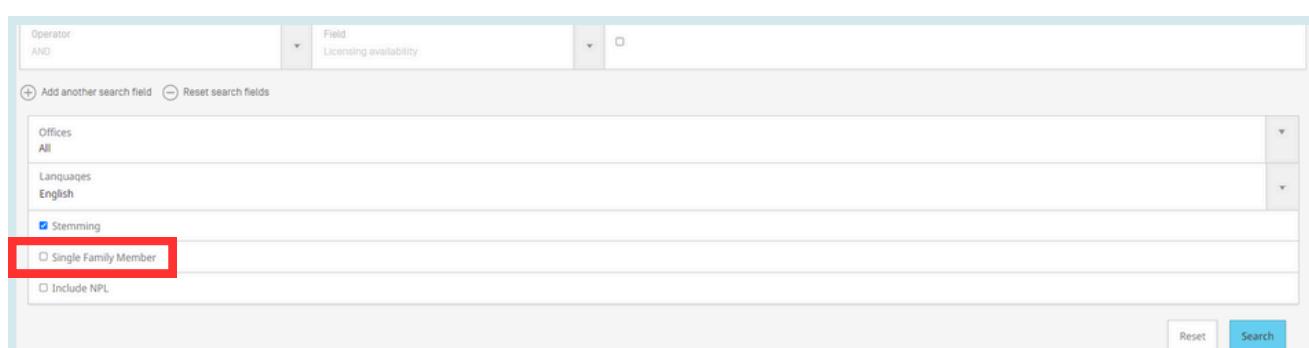
The screenshot shows the PatentScope Simple search interface. At the top, there is a header bar with the number of results (569,424), filter options (Offices: all, Languages: en, Stemming: true), and a search term. Below the header is a 'Refine Options' dialog box. Inside the dialog, there are sections for 'Offices' (set to 'All'), 'Languages' (set to 'English'), and 'Stemming' (checkbox checked). A section for 'Single Family Member' contains two checkboxes: 'Single Family Member' (which is checked and highlighted with a red box) and 'Include NPL'. At the bottom right of the dialog are 'Close' and 'Search' buttons.

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



The screenshot shows the PatentScope Advanced Search interface. At the top, it says 'PATENTSCOPE Advanced Search'. Below the search bar, there is a 'Search terms...' input field and a 'Query Assistant' link. Under the search bar, there is a '+ Expand with related terms' button. The search form includes sections for 'Offices' (set to 'All'), 'Languages' (set to 'English'), and 'Stemming' (checkbox checked). A section for 'Single Family Member' contains two checkboxes: 'Single Family Member' (which is checked and highlighted with a red box) and 'Include NPL'. At the bottom right are 'Reset' and 'Search' buttons.

- 3) The *Field Combination* offers the option to select families before the search:



The screenshot shows the PatentScope Field Combination interface. At the top, there is a search bar with an 'Operator' dropdown set to 'AND' and a 'Field' dropdown set to 'Licensing availability'. Below the search bar, there is a '+ Add another search field' button and a 'Reset search fields' button. The search form includes sections for 'Offices' (set to 'All'), 'Languages' (set to 'English'), and 'Stemming' (checkbox checked). A section for 'Single Family Member' contains two checkboxes: 'Single Family Member' (which is checked and highlighted with a red box) and 'Include NPL'. At the bottom right are 'Reset' and 'Search' buttons.

# THE CLASSIFICATIONS

## INTERNATIONAL PATENT CLASSIFICATION

The International Patent Classification (IPC), established by the Strasbourg Agreement 1971, provides for a hierarchical system of language independent symbols for the classification of patents and utility models according to the different areas of technology to which they pertain. A new version of the IPC enters into force each year on January 1.

### SEARCH FIELDS

1. The **IC** field searches International patent classifications. It will look for subgroups, both hierarchically and lexically.

For example,

- searching for A61M16/10 finds the subgroups A61M16/10...A61M16/18
- searching for A61M16/00 finds the subgroups A61M16/00...A61M16/22

The valid formats for an IPC code search are the following:

- IC:A61M
- IC:A61M16 this is equivalent to: IC:"A61M 16"
- IC:A61M16/00 this is equivalent to: IC:"A61M 16/00" or IC:A61M-16/00

**Important:** You don't have to enter \*(wildcard) to find subgroups, they are automatically included.

2. For an exact IPC code search you need to use the **IC\_EX**.

- IC\_EX:A61M16/00 this is equivalent to: IC\_EX:"A61M 16/00" or IC\_EX:A61M16/00

You may use a \*(wildcard) with the IC\_EX field to include similar subgroups.

- IC\_EX:A61M\*
- IC\_EX:A61M16\*

Here is the bridge between them IC:A61M16/00 = IC\_EX:A61M16\*. In practice IC\_EX:A61M16\* > IC:A61M16/00. On the other hand IC:A61M16/10 > IC\_EX:A61M10\*

# THE CLASSIFICATIONS

## 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. PATENTSCPE 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

IP5	N. of distinct filings classified under CPC classification
US	11,538,100
CN	8,875,231
JP	5,337,705
EP	3,777,520
KR	2,058,568

CPC statistics as of February 2020

## SEARCH FIELDS

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

In the example below, the query: CPC:(Y02A\*) returns 1,1121,420 results, which are grouped by family.

The screenshot shows the PATENTSCOPE search interface with the query "CPC:(Y02A\*)" entered in the search bar. The results summary indicates 1,121,420 results found. Below the search bar are various filters: Offices all, Languages en, Stemming true, Single Family Member false, and Include NPL false. The main results section is titled "Analysis" and includes tabs for "Filters" and "Charts". The "Filters" tab is selected, showing a table with columns for Countries, Applicants, Inventors, IPC code, CPC code, Publication Dates, and Kind code. The table lists results for China, Japan, PCT, and the United States of America, detailing the number of filings, applicants, inventors, and specific CPC codes like A61K 157,994 and A61P 96,994.

Countries	Applicants	Inventors	IPC code	CPC code	Publication Dates	Kind code
China 688,986	MONSANTO TECH LLC 2,108	THE INVENTOR HAS WAIVED THE RIGHT TO BE MENTIONED 3,137	A61K 157,994	y02a 50/30 225,079	2014 27,166	A 386,676
Japan 99,627	DOW AGROSCIENCES LLC 1,703	WANG WEI 2,371	A01G 131,766	y02a 50/20 98,462	2015 29,430	U 341,364
PCT 54,487	ZHEJIANG UNIVERSITY 1,659	WANG WEI 2,371	B01D 110,803	y02a 40/25 85,303	2016 37,495	B 132,413
United States of 43,941	ZHEJIANG UNIVERSITY 1,659	ZHANG WEI 2,052	A61P 96,994	y02a 40/81 74,423	2017 48,297	A1 68,020

# THE CLASSIFICATIONS

## COOPERATIVE PATENT CLASSIFICATION

To search for CPC information, go to the *Field Combination* and select *All Classifications* (combination of IPC and CPC) from the drop-down menus.

PATENTSCOPE Field Combination ▾

Field	Value	?
Front Page		
Operator AND	Field All Classifications	?
Operator AND	Field Cooperative Patent Classification	?

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

PATENTSCOPE Advanced Search ▾

Please enter a valid field... (or use UP/DOWN keys, and TAB or ENTER to select)  
class

- All Classifications
- File Index classification
- Cooperative Patent Classification
- International Class
- International Class Inventive
- International Class N-Inventive
- Main International Class

## FILE INDEX CLASSIFICATION

The File Index Classification (FI) is Japanese classification systems which enables efficient search of patent documents. It is also noted that FI is based on IPC (International Patent Classification).

In PATENTSCOPE, the available search field is FICLASSIF.

For example, FICLASSIF("G09G\*").

# THE BROWSE MENU

PATENTSCOPE Simple Search

Using PATENTSCOPE you can search 114 million patent documents including 4.8 million published international patent applications. PCT publication 51/2023 (21.12.2023) is now available [here](#). The next PCT publication 52/2023 is scheduled for 28.12.2023. [More information](#)

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PATENTSCOPE Live Chat: every Monday from 1:00 PM to 5:00 PM CET

Field: Front Page

Search terms...

Browse by Week (PCT)

- Gazette Archive
- Sequence listing
- National Phase Entries
  - National Phase Entries Full download
  - National Phase Entries Incremental download [last 7 days]
- Authority File
  - Authority File Download Standard ST37

Query Examples

## 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.

Browse by Week (PCT)

Gazette  
51/2023 (21.12.2023)

Excel Download | IPC Statistics

Title	Kind	Appl.No	IPC	Applicant
1. <a href="#">WO/2023/240298</a> DEVICE FOR SEPARATING WOOD PELLETS AND SAWDUST	Initial Publication with ISR[A1]	AT2022/060196	A01K 1/01	SEINER, Christian
2. <a href="#">WO/2023/240299</a> LASER PLOTTER HAVING COUPLED SUCTION ELEMENT	Initial Publication with ISR[A1]	AT2023/060175	B23K 26/142	TROTEC LASER GMBH
3. <a href="#">WO/2023/240300</a> FUEL-CELL INSTALLATION AND METHOD FOR A FUEL-CELL INSTALLATION	Initial Publication with ISR[A1]	AT2023/060182	H02J 1/12	AVL LIST GMBH

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

Browse by Week (PCT)

Gazette  
51/2023 (21.12.2023)

The result list can be downloaded using the *Excel download* button and *IPC statistics* can be accessed:

Browse by Week (PCT)

Gazette  
51/2023 (21.12.2023)

Excel Download | IPC Statistics

# THE BROWSE MENU

## BROWSE BY WEEK (PCT)

IPC statistics available in PATENTSCOPE 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.

IPC Statistics										
Columns										
Chart	IPC Code	23.11.2023	30.11.2023	07.12.2023	14.12.2023	21.12.2023	$\Sigma$ Last 5 gazettes	$\Delta$ Last gazette	Breakout	
<input type="checkbox"/>	A61P 35/00	0	106	90	0	98	294	+98	+49.00	
<input type="checkbox"/>	A61B 5/00	0	44	46	0	52	142	+52	+29.50	
<input type="checkbox"/>	G06N 20/00	0	52	52	0	41	145	+41	+15.00	
<input type="checkbox"/>	H04L 9/40	0	32	34	0	40	106	+40	+23.50	
<input type="checkbox"/>	G08T 7/00	0	47	31	0	39	117	+39	+19.50	
<input type="checkbox"/>	H04W 72/04	0	37	38	0	39	114	+39	+20.25	

- The column  $\Sigma$  Last 5 gazettes shows the number of occurrences of a code in the last 5 gazettes.
- The column  $\Delta$  Last gazette 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.

Chart	IPC Code	23.11.2023	30.11.2023	07.12.2023	14.12.2023	21.12.2023	$\Sigma$ Last 5 gazettes	$\Delta$ Last gazette	Breakout	
<input type="checkbox"/>	A61P 35/00	0	106	+106	90	0	98	294	+98	+49.00

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.



# THE BROWSE MENU

## 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 2023			
Download current year   Download All			
Download	Publication Date	Count	
01/2023	05.01.2023	7,038	<a href="#">View</a>
02/2023	12.01.2023	4,718	<a href="#">View</a>
03/2023	19.01.2023	4,907	<a href="#">View</a>
04/2023	26.01.2023	4,573	<a href="#">View</a>

### PCT Publications - Gazettes Archive - 2023

Gazette 01/2023		Excel   CSV   XML	Previous	Gazettes List	Next
Filter all columns:					
WO Number	Title	Kind	Appl.No	IPC	Applicant
1. WO/2023/272317	AN INTERNAL COMBUSTION ENGINE AND A METHOD FOR OPERATING AN INTERNAL COMBUSTION ENGINE	Initial Publication with ISR [A1]	AT2021/060230	F02D 19/02	INNIO JENBACHER GMBH & CO OG <a href="#">View</a>
2. WO/2023/272318	METHOD FOR CONNECTING COMPONENTS ARRANGED ON TOP OF ONE ANOTHER, COMPOSITE COMPONENT AND DEVICE FOR CARRYING OUT A CORRESPONDING METHOD	Initial Publication with ISR [A1]	AT2022/060100	B23K 20/12	STIRTEC GMBH <a href="#">View</a>
3. WO/2023/272319	SENSOR NETWORK	Initial Publication with ISR [A1]	AT2022/060213	G01D 21/00	SENDANCE GMBH <a href="#">View</a>

## 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.

### Search Sequence Listings

This data is also available for bulk download via anonymous ftp from <a href="ftp://ftp.wipo.int/pub/published_pct_sequences/publication/">ftp://ftp.wipo.int/pub/published_pct_sequences/publication/</a>
Published Nucleotide and/or Amino Acid Sequence Listings Contained in Published PCT Applications (WinZIP 8.0)
Year: 2023 ▾ Publication Date: 21.12.2023 ▾
WO Number Compressed Size Download Applicant
W0/2023/240322 1 KBs <a href="#">SL1.zip</a> CSL INNOVATION PTY LTD

# THE BROWSE MENU

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Here you can download all the national phase entries available at the time of the download.

Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
AE	Microsoft Excel Comma S...	291 KB	No	2,744 KB	90%	12/28/2023 10:50 AM
AM	Microsoft Excel Comma S...	1 KB	No	6 KB	84%	12/28/2023 10:50 AM
AO	Microsoft Excel Comma S...	77 KB	No	356 KB	79%	12/28/2023 10:50 AM
AP	Microsoft Excel Comma S...	51 KB	No	322 KB	85%	12/28/2023 10:50 AM
AT	Microsoft Excel Comma S...	102 KB	No	875 KB	89%	12/28/2023 10:50 AM
AU	Microsoft Excel Comma S...	14,527 KB	No	117,426 KB	88%	12/28/2023 10:50 AM
AZ	Microsoft Excel Comma S...	14 KB	No	81 KB	84%	12/28/2023 10:51 AM
BG	Microsoft Excel Comma S...	11 KB	No	71 KB	85%	12/28/2023 10:51 AM
BN	Microsoft Excel Comma S...	27 KB	No	164 KB	85%	12/28/2023 10:51 AM
BR	Microsoft Excel Comma S...	5,570 KB	No	50,996 KB	90%	12/28/2023 10:51 AM
BY	Microsoft Excel Comma S...	69 KB	No	402 KB	83%	12/28/2023 10:52 AM
BZ	Microsoft Excel Comma S...	5 KB	No	26 KB	84%	12/28/2023 10:52 AM
CA	Microsoft Excel Comma S...	20,287 KB	No	176,666 KB	89%	12/28/2023 10:52 AM

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Name	Type	Compressed size	Password ...	Size	Ratio	Date modified
AU	Microsoft Excel Comma S...	3 KB	No	14 KB	81%	12/28/2023 11:17 AM
CH	Microsoft Excel Comma S...	1 KB	No	1 KB	42%	12/28/2023 11:17 AM
DK	Microsoft Excel Comma S...	1 KB	No	2 KB	79%	12/28/2023 11:17 AM
EA	Microsoft Excel Comma S...	9 KB	No	57 KB	85%	12/28/2023 11:17 AM
EP	Microsoft Excel Comma S...	135 KB	No	632 KB	79%	12/28/2023 11:17 AM
IQ	Microsoft Excel Comma S...	1 KB	No	1 KB	10%	12/28/2023 11:17 AM
RO	Microsoft Excel Comma S...	1 KB	No	1 KB	60%	12/28/2023 11:17 AM
SE	Microsoft Excel Comma S...	1 KB	No	1 KB	73%	12/28/2023 11:17 AM
SG	Microsoft Excel Comma S...	1 KB	No	1 KB	26%	12/28/2023 11:17 AM
TH	Microsoft Excel Comma S...	2 KB	No	9 KB	82%	12/28/2023 11:17 AM
US	Microsoft Excel Comma S...	131 KB	No	589 KB	78%	12/28/2023 11:17 AM

## AUTHORITY FILE DOWNLOAD STANDARD ST37

Download the official PCT applications of the current year.

# 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.

This screenshot shows the search results for 'FP (biodegradable cup)'. The interface includes a search bar at the top with the query 'FP (biodegradable cup)'. Below the search bar are filters: '409 results', 'Offices all', 'Languages en', 'Stemming true', 'Single Family Member false', and 'Include NPL false'. On the right side are icons for machine translation, download, and print. The main content area displays three patent records:

- 1. 2003165181 BIODEGRADABLE PAPER CUP** (JP - 10.06.2003)
 

Int.Class B32B 27/10 Appl.No 2001366426 Applicant OJI PAPER CO LTD Inventor MIKAMO HIROAKI  
 PROBLEM TO BE SOLVED: To provide processed paper for a biodegradable paper cup improved in biodegradability, oil resistance, moistureproof properties and water resistance by the use of a hot-melt adhesive and not generating wrinkles in the surface of the outer layer thereof at the time of molding of the paper cup, and the biodegradable paper cup.  
 SOLUTION: The processed paper for the biodegradable paper cup has layered constitution of inner surface resin layer/paper layer (1)/hot-melt adhesive layer/ paper layer (2). The inner surface resin layer comprises a biodegradable resin, and the hot-melt adhesive layer is constituted of a composition based on the biodegradable resin. The biodegradable paper cup using the same is also disclosed.  
 COPYRIGHT: [C]2003.JPO
- 2. 20200231326 BIODEGRADABLE DRINKING CUP ASSEMBLY** (US - 23.07.2020)
 

Int.Class B65D 3/08 Appl.No 16253310 Applicant Jessica Romano Inventor Jessica Romano  
 A biodegradable drinking cup assembly for serving hot and cold beverages includes a cup that defines an interior space. The cup comprises hemp fiber so that the cup is biodegradable. The cup, in an upright configuration, is configured to position a liquid in the interior space. The cup insulates a hot or cold beverage and is configured for composting after use.
- 3. 111518375 BIODEGRADABLE THERMOFORMED CUP AND PREPARATION METHOD** (CN - 11.08.2020)
 

Int.Class C08L 87/04 Appl.No 202010528270.1 Applicant CSIC PRIDE [NANJING] TECHNOLOGY INNOVATION CO., LTD. Inventor LI JIN  
 The invention discloses a biodegradable thermoformed cup. The biodegradable thermoformed cup comprises the following components in parts by weight: 55 to 75 parts of polylactic acid, 10 to 25 parts of polypropylene carbonate, 1 to 10 parts of cotton fibers, 1 to 10 parts of filler powder, 0.1 to 1 part of paraffin, 0.1 to 1 part of a coupling agent and 0.1 to 0.9 part of a compatibilizer. The biodegradable thermoformed cup is easy to form through thermoforming, the cup wall is thinner, high strength is realized, the cup wall is not easy to deform, and the cup is biodegradable and pollution-free. The invention further provides a preparation method of the biodegradable thermoformed cup.

The first component of this window:

This screenshot shows the search results page with various UI elements labeled A through K:

- A:** Refine Search button
- B:** Sort result button
- 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
- E:** Page number indicator (1/41)
- F:** Download button
- G:** Machine translation button
- H:** Simple view button
- I:** Double view button
- J:** All view button
- K:** All+Image view button

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

Two dropdown menus are shown:

- Sort: Relevance ▾** (B)
  - Relevance
  - Pub Date Desc
  - Pub Date Asc
  - App Date Desc
  - In App Date Asc
- View: All ▾** (D)
  - Simple
  - Double
  - All
  - All+Image
  - 2001366426 Image
  - Multi-columns

- 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

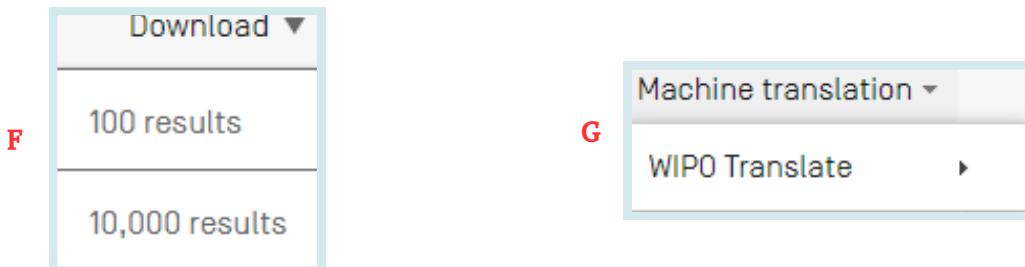
# SEARCH RESULTS

## DISPLAY OF THE SEARCH RESULTS

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 feed for the search query to monitor patenting activity and updates in area of interest. In order to create an RSS page that can be used in an RSS feed reader, users will have first log in to their WIPO account, run their queries and save them, making sure that the private query box is unticked. In the saved queries, the RSS button will be available.
- I: Query tree shows the breakdown of the results

```
+ (PAA:biodegradable INA:biodegradable RPA:biodegradable ICS:biodegradable AN:biodegradable WO:biodegradable PN:biodegradable GN:biodegradable EN_Tl:biodegradable FR_Tl:biodegradable DE_Tl:biodegradable ES_Tl:biodegradable
PAA:biodegradable --> 300
INA:biodegradable --> 1
RPA:biodegradable --> 0
ICS:biodegradable --> 0
AN:biodegradable --> 0
WO:biodegradable --> 0
PN:biodegradable --> 0
GN:biodegradable --> 0
EN_Tl:biodegradable --> 29761
FR_Tl:biodegradable --> 1777
```

- J: Save query button for logged-in users
- K: Side-by-side view: displays the result list next to one document opened

# SEARCH RESULTS

## DISPLAY OF THE SEARCH RESULTS

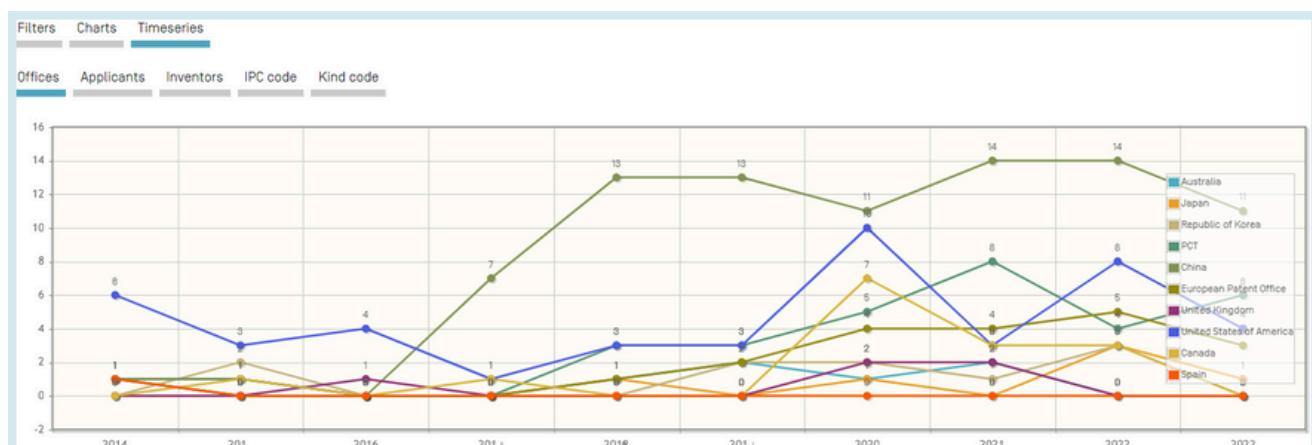
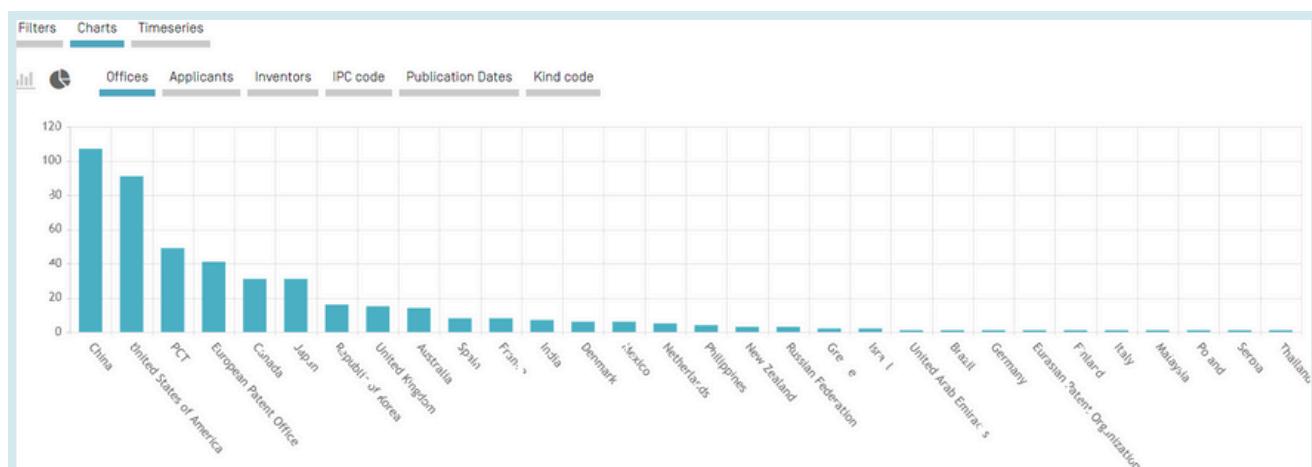
The screenshot shows the search results for 'FP (biodegradable cup)'. It includes a search bar, filter options (Offices all, Languages en, Stemming true, Single Family Member false, Include NPL false), a red box around the 'Statistics' button, sorting and pagination controls (Sort: Relevance, Per page: 10, View: All, 1/41), download and machine translation links, and a search icon.

The graph button gives access to statistics.

The screenshot shows the 'Analysis' section with a table of statistics. The table has columns for Offices, Applicants, Inventors, IPC code, Publication Dates, and Kind code. A red box highlights the 'Filters' tab at the top of the table interface.

Offices	Applicants	Inventors	IPC code	Publication Dates	Kind code
China 107	INTERNATIONAL PAPER COMPANY	LIU ZHIZHONG 9	B65D 178	1992 5	A 144
United States of America 91	JIE AN [ZHANGZHOU] PLASTIC INDUSTRIAL CO LTD 9	YANG ZHIJIE 9	A47G 68	1993 2	A1 74
PCT 48		MIYAKE EISHIN 7	C08L 50	1994 3	U 54
European Patent Office 41	TOPPAN PRINTING CO LTD 8	VARANO RICHARD 6	B32B 39	1995 1	B1 38
Canada 31	MY TEA CUP AG 7	OIPRE, JAMES E. 5	D21H 28	1996 5	B2 35
Japan 31	VERTEC BIOSOLVENTS LLC 7	SADLIER CLAUS E. 5	A01G 24	1997 6	B 23

- Filters* show the statistics in a table format;
- Charts* show the same information in a graph format, either bar or pie;
- Timeseries* show the statistics over time.



# SEARCH RESULTS

## DISPLAY OF THE SEARCH RESULTS



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.

**Settings**

Query Office **Result** Download Interface Others

Result List Language Default

Analysis tab open

Analysis type Table

Analysis graph bar

No of Items/Group 50

Group by \*

- Countries
- Offices
- Applicants
- Inventors
- IPC code
- CPC code
- Publication Dates
- Filing Dates
- Kind code
- Publisher [NPL]
- Journal [NPL]

FP (biodegradable cup)

409 results Offices all Languages en Stemming true Single Family Member false Include NPL false

Sort: Relevance ▾ Per page: 10 ▾ View: All ▾ 1 / 41 ▾

Download ▾ Machine translation ▾

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:

Refine Options

Offices All

Languages English

Stemming

Single Family Member

Include NPL

# SEARCH RESULTS

## READING THE RESULT PAGE

PCT Biblio. Data   Description   Claims   Drawings   ISR/WOSA/A17[2][a]   National Phase   Patent Family   Notices   Documents

Start watching   PermaLink   Machine translation ▾

Publication Number W0/2021/239982	Title [EN] BIODEGRADABLE CAPSULES [FR] CAPSULES BIODEGRADABLES
Publication Date 02.12.2021	[Fig. 2]
International Application No. PCT/EP2021/064419	
International Filing Date 28.05.2021	
IPC B65D 85/804 2006.1	
CPC B29C 45/0001   B29C 45/1481   B29C 45/1643 B29K 2067/04   B65B 7/2842   B65D 85/804	
View more classifications	
Applicants MY TEA EUR AG [CH/CH] Todstrasse 51 8810 Horgen, CH	
Inventors SANDHERR, Max SCHAEFFER, Jacques	<b>Abstract</b> [EN] The present invention relates to the field of sealed capsules that are biodegradable by industrial composting and by domestic composting, for single use, containing at least one substance in powder form for the preparation of a beverage, e.g. coffee, intended to be extracted under pressure, said capsule comprising an enclosure with a bottom and a side wall having a circular rim, and a lid welded to the periphery of the rim of the enclosure, characterised in that the bottom, the side wall and the circular rim are formed by injection moulding of at least one formulation comprising: [i] at least one polymer selected from polyhydroxybutyrate, and [ii] at least one ingredient selected from silicates, vitamin E, plasticised plant or animal proteins, or mixtures thereof. [FR] La présente invention concerne le domaine des capsules fermées biodégradables par un compostage industriel et par un compostage domestique, à usage unique, contenant au moins une substance sous forme de poudre pour la préparation d'une boisson, par exemple du café, prévues pour être extrait sous pression, ladite capsule comprenant une enceinte avec un fond et une paroi latérale ayant un rebord circulaire, et un opercule soudu sur le pourtour du rebord de l'enceinte, caractérisée en ce que le fond, la paroi latérale et le rebord circulaire sont formés par moulage par injection d'au moins une formulation comprenant: [i] au moins un polymère choisi parmi les polyhydroxybutyrate, et [ii] au moins un ingrédient choisi parmi les silicates, la vitamine E, les protéines végétales ou animales plastifiées, ou leurs mélanges.
Agents AUGUST DEBOUZY 7 rue de Téhéran 75008 Paris, FR	Related patent documents FR2110900 CA3184488 BR112022023833 CN115720584 EP4157745 US20230202748 JP2023523320 IL298480 BR112022023933 MXMX/a/2022/014730 RU2022130592
Priority Data FR2005734 28.05.2020 FR	
Publication Language French [fr]	
Filing Language French [fr]	

## 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

# SEARCH RESULTS

## READING THE RESULT PAGE

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:

[https://patentscope.wipo.int/search/en/help/national\\_phase\\_entry.jsf](https://patentscope.wipo.int/search/en/help/national_phase_entry.jsf)

Patent Family



family member information and timeline

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.

Compounds



will show the compounds and their location within the patent document

# SEARCH RESULTS

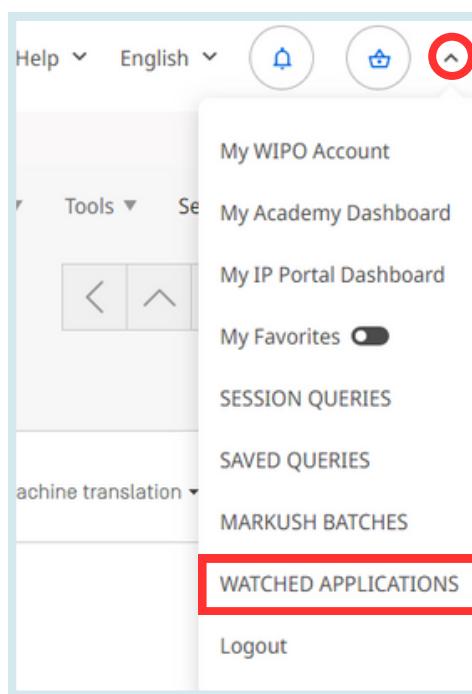
## PCT MONITORING

PCT monitoring feature aims to monitor changes of published PCT applications.

To use it, click the *start watching* button available in the *PCT Biblio. Data* tab for PCT applications.



Then go to your WIPO account and click the *watched applications*.



Here you will find the list of the published PCT applications that you are currently monitoring. The maximum number of applications that can be monitored is 20.

If changes occurred in one or more applications, since your last log-in, the application or applications in question will be highlighted. When you are watching one or more applications, each time you open a session, you will have to go to this page, otherwise the potential new highlighting will be gone when you open the next session.

# SEARCH RESULTS

## PCT MONITORING

### Watched Applications

These are the PCT applications your are keeping an eye on.

Application ID	Last Republication	Last Biblio. Update	Last National Phase Update	Last Document Update	
WO2019109838			06.09.2022		
WO2022025569				09.02.2023	
WO2022103867	19.05.2022	19.05.2022		25.05.2023	
WO2023230640	07.12.2023	07.12.2023		07.12.2023	
WO2023230655	07.12.2023	07.12.2023		07.12.2023	
WO2023230677	07.12.2023	07.12.2023		21.12.2023	

Change information includes new documents, national phase information, bibliographic updates and last republication.

Click the trash button to remove the application from the watched list.

Click the magnifying glass button to access the application.

# TOOLS

PATENTSCOPE Simple Search

Using PATENTSCOPE you can search 114 million patent documents including 4.8 million published international patent applications (PCT). [Detailed coverage information](#)  
PCT publication 52/2023 (28.12.2023) is now available [here](#). The next PCT publication 01/2024 is scheduled for 04.01.2024. [More](#)  
Check out the [latest PATENTSCOPE news and features](#)

Feedback Goto Search ▾ Browse ▾ Tools ▾ Settings

- WIPO Translate
- WIPO Pearl
- IPC Green Inventory
- Support COVID-19 efforts
- Portal to patent registers

## WIPO TRANSLATE

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

28 language combinations are available:

- English-Arabic
- English-Chinese
- English-Finnish
- English-French
- English-German
- English-Italian
- English-Japanese
- English-Korean
- English-Polish
- English-Russian
- English-Spanish
- Arabic-English
- Chinese-English
- English-Finnish
- French-English
- German-English
- Italian - English
- Japanese-English
- Korean-English
- Polish-English
- Russian-English
- Spanish-English
- Chinese-Japanese
- Chinese-Korean
- Japanese-Chinese
- Japanese-Korean
- Korean-Chinese
- Korean-Japanese

# TOOLS

## WIPO TRANSLATE

The screenshot shows the WIPO Translate interface. At the top, there is a navigation bar with links for Home, IP Services, PATENTSCOPE, Database Search, and WIPO translate. Below the navigation bar, there is a header with the WIPO logo and the word "TRANSLATE". A sub-header says "Instant patent translation". On the left, there is a "Translate" tab. In the center, there is a text input box labeled "Text to be translated:" containing the letter "A". Below it, there is a "Language pair:" dropdown menu labeled "B" containing "English->Chinese". Next to it is a "Domain:" dropdown menu labeled "C" containing "[automatic detection]". There is also a checkbox labeled "Show concordances:" with a checked mark. At the bottom right of the input area is a "Translate" button. Below the input area, there is a section titled "Related links:" with two items:

- WIPO Translate: Cutting-Edge Translation Tool For Patent Documents Extends Language Coverage
- Interested in your own version of WIPO Translate? Find out more

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 screenshot shows the WIPO Translate interface after a translation has been performed. The "Language pair:" dropdown is set to "English->Chinese" and the "Domain:" dropdown is set to "ADMN-Admin, Business, Management & Soc Sci". The "Show concordances:" checkbox is checked. The main text area contains the following message: "This automatic translation is provided for information only, it may contain discrepancies or mistakes and does not have any juridical value." Below this, there is a list of instructions: "Please hover your mouse over parallel segments of text", "Click to view other proposals", and "Select words or phrases on the left to access other translation proposals". The main text of the translation is: "The present invention relates to shape memory polymers characterized in that they comprise BiOCl pigments as X-ray contrast agents. Such doped polymers are used particularly in medical technology products, such as reinforcing pins for the spinal column, tooth root pins, as bone cement, and in catheter materials." To the right of this text, there is a pop-up window titled "Choose among proposals, or edit the text". It contains several alternative translation suggestions, each with a "Ok" button. The suggestions include: "本发明涉及形状记忆聚合物，其特征在于，它们包括作为X射线造影剂的biocl颜料。这种掺杂的聚合物特别用于医疗技术材料。", "本发明涉及形状记忆聚合物，其特征在于，它们包括作为X射线造影剂的biocl颜料。", "本发明涉及形状记忆聚合物，其特征在于，它们包括作为X射线造影剂的biocl颜料。", "本发明涉及形状记忆聚合物，其特征在于，它们包括作为X射线造影剂的biocl颜料。", and "本发明涉及形状记忆聚合物，其特征在于，它们包括作为X射线造影剂的biocl颜料。". At the bottom left, there is a "Related links:" section with the same two items as the first screenshot.

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.

# TOOLS

## 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.

More information on how to use it available here:

<https://www.wipo.int/reference/en/wipopearl/guide.html>

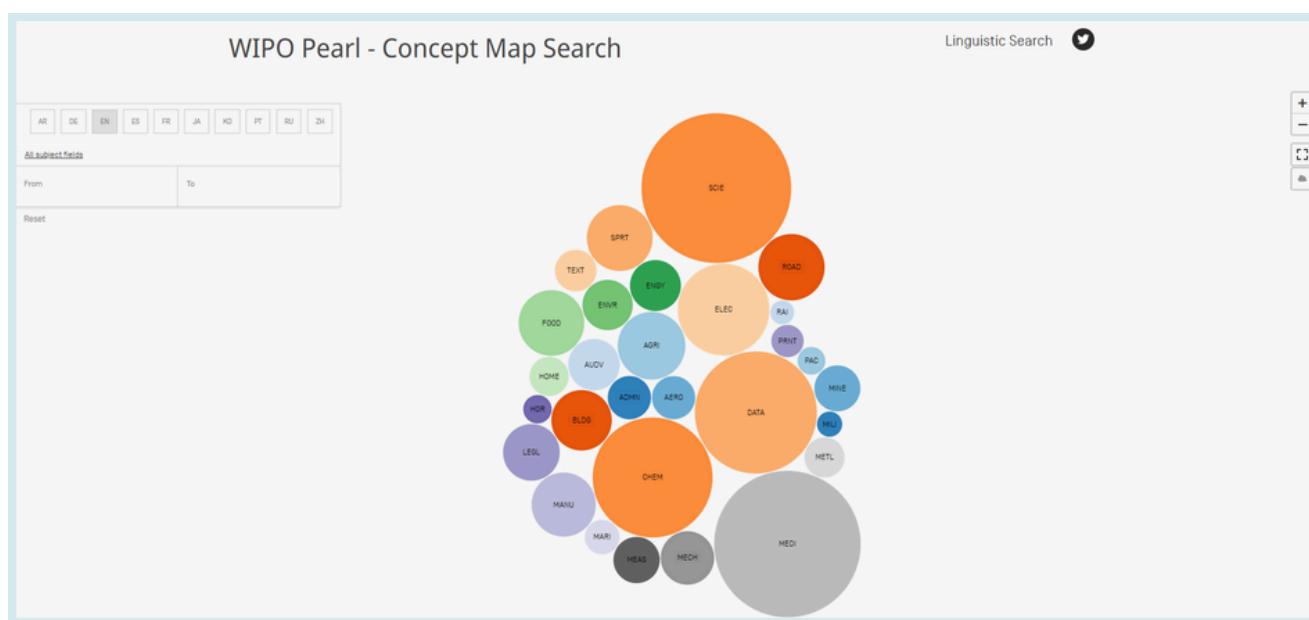
The screenshot shows the WIPO Pearl - Linguistic Search interface. At the top, there is a navigation bar with 'Home > WIPO Pearl > Linguistic Search'. The main title is 'WIPO Pearl - Linguistic Search'. Below the title is a search bar with the placeholder 'Enter your term here' and a magnifying glass icon. There are also 'Search options' and 'Reset' buttons. To the right of the search bar is a 'Concept Map Search' button and a Twitter icon. The search term 'bicycle fork' is entered in the search bar. Below the search bar, the text '40 HITS for bicycle fork [Filters](#)' is displayed. Underneath, there are three filter options: 'Source language All', 'Target language All', and 'Subject field All'. A list of search results is shown, starting with 'Terms bicycle fork [ROAD], fourche de bicyclette [ROAD], forklift truck [MANU], forklift [MANU], shift fork [ROAD], selector fork [ROAD]...'. Below this, a section titled 'ROAD / Cycles & non-powered vehicles' has a link 'Show full record'. At the bottom, there is a table with three rows, each containing a term and its reliability score: 'DE > Fahrradgabel Reliability 3 / 4', 'EN > **bicycle fork** Reliability 3 / 4', and 'ES > horquilla Reliability 3 / 4'. Each row has a '...' button on the far right.

# TOOLS

WIPO PEARL

## **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.



# TOOLS

## 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.

### IPC Green Inventory

The "IPC Green Inventory", developed by the [IPC Committee of Experts](#), facilitates searches for patent information relating to Environmentally Sound Technologies (ESTs), as listed by the [United Nations Framework Convention on Climate Change \(UNFCCC\)](#). ESTs are currently scattered widely across the IPC in numerous technical fields. The Inventory attempts to collect them in one place.

For more information about how to use the IPC Green Inventory please click [here](#).

The Inventory does not purport to be fully exhaustive in its coverage

TOPIC	IPC	PATENTSCOPE
► ALTERNATIVE ENERGY PRODUCTION		
► TRANSPORTATION		
► ENERGY CONSERVATION		
► WASTE MANAGEMENT		
► AGRICULTURE / FORESTRY		
► ADMINISTRATIVE, REGULATORY OR DESIGN ASPECTS		
► NUCLEAR POWER GENERATION		

TOPIC	IPC	PATENTSCOPE
▼ ALTERNATIVE ENERGY PRODUCTION		
► BIO-FUELS		
INTEGRATED GASIFICATION COMBINED CYCLE (IGCC)	C10L3/00 F02C3/28	C10L3/00 F02C3/28
► FUEL CELLS	H01M 4/88-4/88, 8/00-8/24, 12/00-12/08	H01M 4/88-4/88, 8/00-8/24, 12/00-12/08
PYROLYSIS OR GASIFICATION OF BIOMASS	C10B 53/00 C10J	C10B 53/00 C10J
► HARNESSING ENERGY FROM MANMADE WASTE		
► HYDRO ENERGY		
OCEAN THERMAL ENERGY CONVERSION (OTEC)	F03G 7/05	F03G 7/05
► WIND ENERGY	F03D	F03D
► SOLAR ENERGY	E24S H02S	E24S H02S
► GEOTHERMAL ENERGY	E24T	E24T
► OTHER PRODUCTION OR USE OF HEAT, NOT DERIVED FROM COMBUSTION, E.G. NATURAL HEAT	F24T 10/00-50/00 E24V 30/00-50/00	F24T 10/00-50/00 E24V 30/00-50/00
► USING WASTE HEAT		
DEVICES FOR PRODUCING MECHANICAL POWER FROM MUSCLE ENERGY	F03G 5/00-5/08	F03G 5/00-5/08

# TOOLS

## SUPPORT COVID-19 EFFORTS

This search functionality aims to facilitate the location and retrieval of information contained in published patent documents that may be useful for innovators developing new technologies to fight the COVID-19 pandemic. It provides an easily accessible source of intelligence for improving the detection, prevention, and treatment of diseases such as the novel coronavirus.

### PATENTSCOPE COVID-19 INDEX

The WIPO COVID-19 Search Facility of PATENTSCOPE will provide scientists, engineers, public health policymakers, industry actors and members of the general public with an easily accessible source of intelligence for improving the detection, prevention, and treatment of diseases such as the novel coronavirus.

"Given the drastic impact of the COVID-19 crisis on human health and welfare, the world needs easy access to every bit of information available for the successful innovation in the pursuit of vaccines, treatments and cures. Patent documents are rich sources of technological know-how acquired by humans over the centuries," said WIPO Director General Francis Gurry. "I am pleased that WIPO's new patent-searching tool helps disseminate information on technologies that others may build upon for the global fight against COVID-19."

At the time of release, the new PATENTSCOPE search facility provides dozens of search queries specially curated by patent information experts who have identified technological areas relevant to the detection, prevention and treatment of COVID-19.

PATENTSCOPE contains over 83 million patent and related documents, provides comprehensive searching of patent information with multi-lingual search capabilities and an automatic translation system that uses Artificial Intelligence (AI) technologies for highly accurate results.

Via the new COVID-19 functionality, thousands of documents deemed of potential use to innovators working on COVID-19 mitigation efforts would be returned.

[Full press release](#)

Artificial respiration	Diagnostics	Disinfection	Informatics	Medical Equipment	Medical Facilities and Transport	Medical Treatment	Medical treatment/Prophylactic
------------------------	-------------	--------------	-------------	-------------------	----------------------------------	-------------------	--------------------------------

Medical treatment/Therapeutic	Personal protective equipment
-------------------------------	-------------------------------

IPC Symbol(s)	Title	Query
A61H 31/00	Artificial respiration or heart stimulation, e.g. heart massage	<a href="#">EN</a>
A61M 16/00	Devices for influencing the respiratory system of patients by gas treatment, e.g. mouth-to-mouth respiration; Tracheal tubes	<a href="#">EN</a>

## 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.



# SETTINGS

The screenshot shows the 'Settings' page with the 'Settings' tab highlighted by a red box. At the top right, there are buttons for 'Feedback', 'Goto', 'Search', 'Browse', 'Tools', and 'Settings'. Below these are 'Reset', 'Close', and 'Save' buttons. The main area is titled 'Settings'.

- The *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 screenshot shows the 'Query' tab settings. The 'Query' tab is highlighted with a red box. Other tabs include 'Office', 'Result', 'Download', 'Interface', and 'Others'. Under 'Query Language', 'Default' is selected. Under 'Stemming', 'Stemming' is checked. Under 'Sort by', 'Relevance' is selected. Under 'List Length', '10' is entered. Under 'Result List View', 'All' is selected.

- The *Office* tab: Select the patent collection(s) for your patent searches.

The screenshot shows the 'Office' tab settings. The 'Office' tab is highlighted with a red box. Other tabs include 'Query', 'Result', 'Download', 'Interface', and 'Others'. Under 'Office', 'All' is selected. A large list of patent collections follows, each with a checkbox:
 

- All (checked)
- PCT
- Africa
  - African Regional Intellectual Property Organization [ARIPO]
  - ARABPAT
    - Egypt
    - Saudi Arabia
  - Americas
    - Canada
  - LATIPAT
    - Argentina
    - Colombia
    - Dominican Republic
    - Guatemala
    - Nicaragua
    - Uruguay
  - Asia-Europe
    - Australia
- Kenya
- Jordan
- Tunisia
- United States of America
- Brazil
- Costa Rica
- Ecuador
- Honduras
- Panama
- Austria
- South Africa
- Morocco
- Chile
- Cuba
- El Salvador
- Mexico
- Peru
- Bahrain

- 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 screenshot shows the 'Result' tab settings. The 'Result' tab is highlighted with a red box. Other tabs include 'Query', 'Office', 'Download', 'Interface', and 'Others'. Under 'Result List Language', 'Default' is selected. Under 'Analysis tab open', 'Analysis type' is set to 'Table'. Under 'Analysis graph', 'bar' is selected. Under 'No of Items/Group', '50' is entered. On the right, under 'Group by \*', several options are listed with checkboxes:
 

- Offices (checked)
- Applicants (checked)
- Inventors (checked)
- IPC code (checked)
- CPC code (unchecked)
- Publication Dates (checked)
- Filing Dates (unchecked)
- Kind code (checked)
- Publisher [NPL] (unchecked)
- Journal [NPL] (unchecked)

# SETTINGS

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

Query Office Result Download Interface Others

Enable multi documents download

Download Fields

Application Number  
 Application Date  
 Publication Number  
 Publication Date  
 Country Code  
 Title  
 Abstract  
 IPC  
 Applicants  
 Inventors  
 Priority Data  
 National Phase Entries  
 Image

- 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.

Query Office Result Download Interface Others

Tooltip Help  Result and detail side by side  
 IPC Tooltip Help  Multiple Windows Interface  
 Advanced Search Instant Help  
Default Search Form  
Simple

More

Show Google Translate  
 Use Tapta beta features

- The *Others* tab allows you to subscribe to notifications.

Query Office Result Download Interface Others

Keep me informed

# NAVIGATION BAR

The screenshot shows the top navigation bar of the PATENTSCOPE website. It includes the WIPO logo, a search bar, and links for Help, English, and IP Portal login. Below the bar, the main search interface is visible, featuring a search form with fields for 'Field' and 'Search terms...', and a 'Query Examples' section.

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

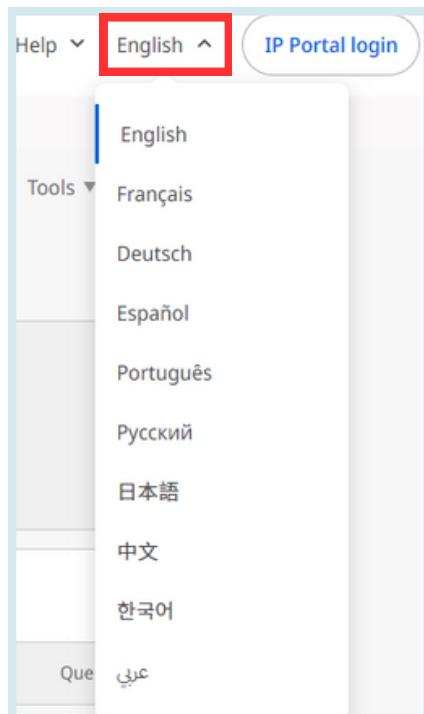
The screenshot shows the 'Help' section of the website. It includes a 'How to Search' section with links to various search guides, a 'PATENTSCOPE News' section with a feed icon, and a 'Data Coverage' section listing various patent and non-patent literature types.

The screenshot shows three sections: 'Data Coverage' (listing PCT applications, national phase entries, and other collections), 'Codes' (listing INID, Kind, and Country codes), and 'About' (listing the version number 1.8.6-44271).

# NAVIGATION BAR

## LANGUAGES

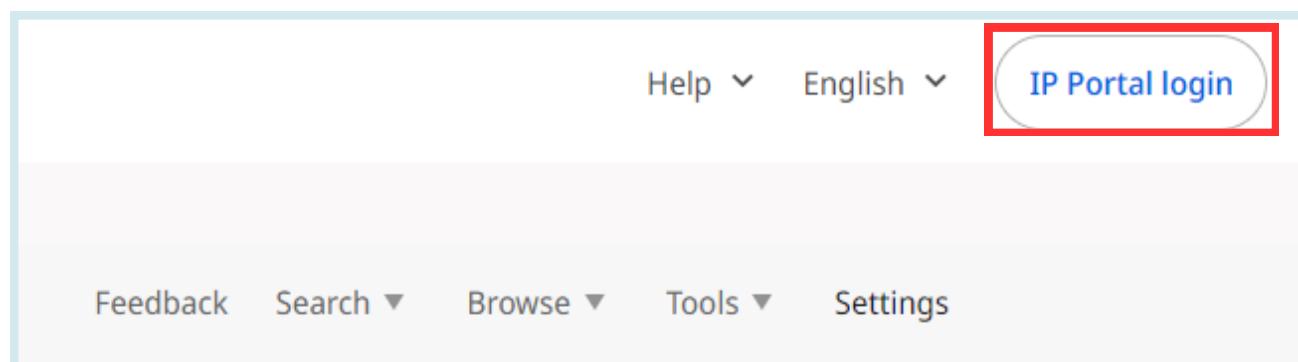
The language of the interface can be selected from the drop-down menu English;



## LOGIN

### ACCOUNT SIGN UP

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



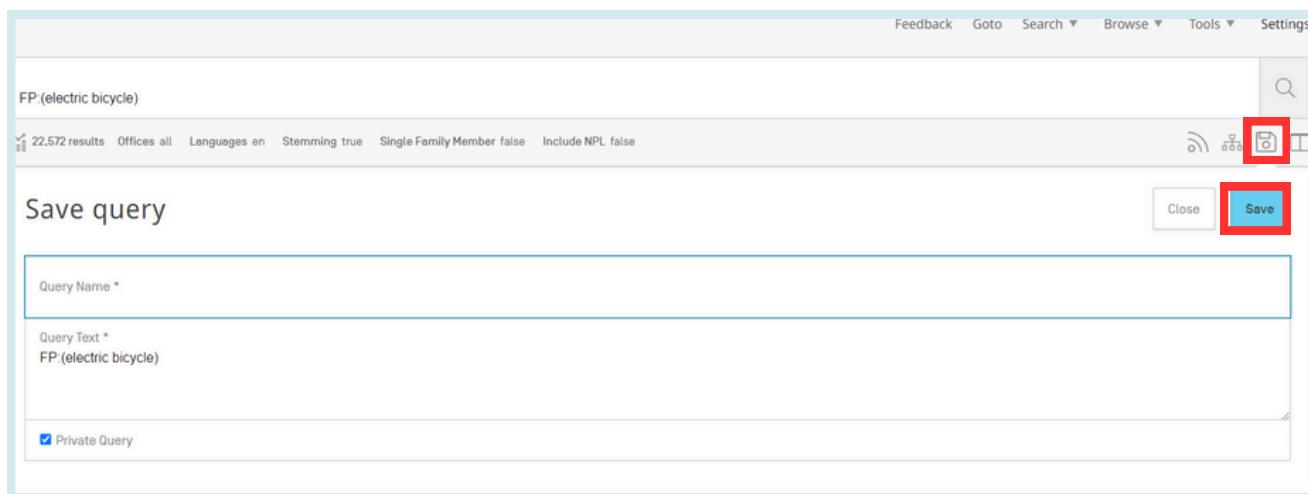
# NAVIGATION BAR

## LOGIN

### LOGIN

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

- 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.

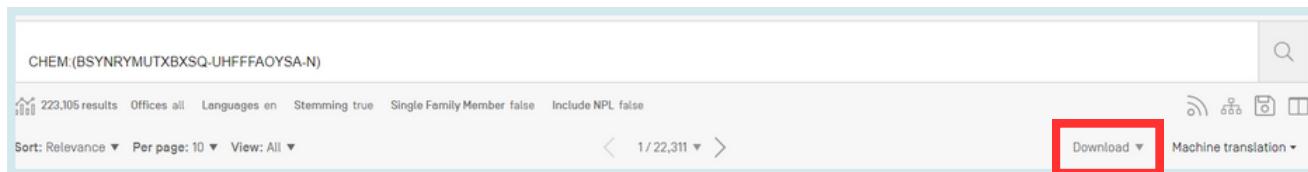
If you would like to share your queries and use RSS feed you need to run the query again, using the magnifying glass , give it a new name and untick the *private Query box*; then RSS button will be available.

Saved Queries										
These are all queries saved in your PATENTSCOPE profile. They are available every time you log in!										
Name	Search for	Offices	Sort by	Stem	Single Family Member	Page	Size	Private		
cabin car	FP:(cabin car)	All	Relevance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	10	<input checked="" type="checkbox"/>		
aspirin	CHEM:(BSYNRYMUTXBSQ-UHFFFAOYSA-N)	All	Relevance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1	10	<input checked="" type="checkbox"/>		

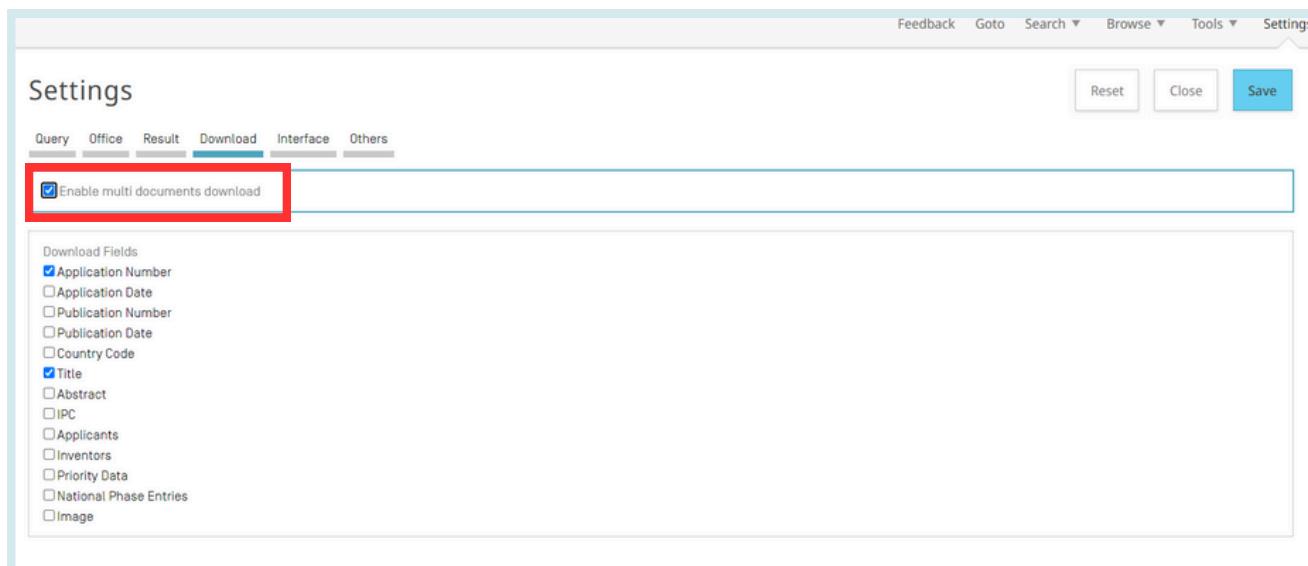
- Download the result lists up to 10,000 records using the Download button above the result list. After clicking the icon, the downloading will automatically start and open an Excel sheet with either 1000 (simple icon) result or 10,000 (icon 10k).

# NAVIGATION BAR

## LOGIN



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



- 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.
- Select the *Offices* when using *Simple Search*.

# 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:

Operators	Example	Explanation
BOOLEAN		always use in capital
AND	train AND plane	Returns all documents that contain both the first term and the second term.
OR	train OR plane	Returns all documents that contain either the first term or the second term or both.
NOT	NOT plane	Returns all documents that do not contain the term following NOT.
ANDNOT	train ANDNOT plane	Returns all documents that contain the first term and not the term following NOT.
WILDCARD		50 wildcards/query max 10 wildcards/individual fields (EN_ALLTXT for example)except: <ul style="list-style-type: none"> <li>• EN_ALL, FR_ALL, DE_AL.. 3 wildcards max</li> <li>• FR_ALLTXT, DE_ALLTXT... 5 wildcards max</li> </ul> 2 wildcards/phrase max (EN_TI:“ele* car* veh*”) No leading wildcard (EN_TI:“*elec”)
?	te?t	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; Maximum of 3 wildcards per query for non-logged-in users and 7 for logged-in users.

(Continued on Next Page)

# ANNEX

## SEARCH SYNTAX

*	electr*	Returns all documents that contain electric, electrics, electrical, 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). Maximum of 3 wildcards per query for non-logged-in users and 7 for logged-in users
<b>OTHERS</b>		
^	power^10 nuclear	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.
+/-	+electric -power	Returns all documents that contain electric and that do not contain power Filtered searching allows to require (+) a query term and to prohibit (-) one.
~	roo~	Fuzzy search returns all documents that contain room, roof, root, etc.
( )	(spaghetti OR plate) AND fork	Returns all documents that contain spaghetti or plate and fork. Grouping is used to group clauses to form sub-queries.
~/NEAR	“heart monitoring”^10 Heart NEAR monitoring	Proximity search allows specifying a distance between words. In the example with tilde “heart” and “monitoring” are separated by 10 other words; NEAR separates words by 5 words by default
[ ]	[01.01.2000 TO 01.01.2001]	Returns all documents that contain dates between 01.01.2000 and 01.01.2001. Range search uses [ ] to include the bounds.
{ }	{Smith TO Townsend}	Returns all documents that contain names between Smith and Townsend, but not including Smith and Townsend. Range search uses { } to exclude the bounds.

# ANNEX

## 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 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!

List of supported field codes in the PATENTSCOPE search service:

Symbol	Name	Example
AU	Author	AU:(Smith,John)
CHEM	Chemical	CHEM:(BSYNRYMUTXBSQ-UHFFFAOYSA-N)
CTR	Country	The entered value is searched against the originated country of the physical patent document (national/regional collections). When in doubt you should use the office field (OF) CTR:(CU or KR)
DG	Grant Date	DG:(2010) DG:(201007) DG:(20100715) DG:([01.01.2000 TO 01.01.2005])
DS	Designated States	DS:(US)
DTY	Latest Kind code	DTY:(U) DTY:(Y)
DTY_M	Latest and previous Kind codes	DTY_M:(U) DTY_M:(Y)
FR	Front Page	The entered value is searched against the Title, Abstract, Numbers and Names FP:(“electric car”~50) FP:(Smith OR Klein) FP:(WO2010000001) FP:(EP2012001709) FP:(“sol* panel”~5) FP:(elect?icit?) FP:(electric^10 AND car^3)

# ANNEX

## FIELD CODES

FTERM	File Forming Term	FTERM:(5C080JJ06)
IPE	International Preliminary Examination	IPE:(Report) IPE:(None)
ISA	International Search Authority	ISA:(US)
ISR	International Search Report	ISR:(Report) ISR:(Declaration) ISR:(None)
JO	Journal	JO:(Cell Discovery)
LGF	Filing Language	LGF:(en) LGF:(ja)
LI	Licensing availability	LI:1 LI:true
OF	Office Code	OF:(WO o US)
PU	Publisher	PU:(IEEE)
SIS	Supplementary International Search	SIS:(Report) SIS:(Declaration) SIS:(None)
TPO	Third Party Observation	TPO:1 AND OF:WO TPO:true AND OF:WO
<b>Applicant</b>		
AAD	Applicant Address	AAD:(London)
AADC	Applicant Address Country	AADC:(US)
ANA	Applicant Nationality	ANA:(US)
ARE	Applicant Residence	ARE:(US)
PA	Applicant Name	PA:(Smith, John)
PAA	Applicant All Data	PAA:(Smith, John US California)
PAF	Main Applicant name	PAF:(Smith, John)

# ANNEX

## FIELD CODES

Application		
AD	Application Date	AD:(2010) AD:(201007) AD:(20100715) AD:([01.01.2000 TO 01.01.2005])
AN	Application Number	Application number with or without the country code, in various forms. AN:(US2000*)
ANID	Unambiguous National Application Number	ANID:(11592758)
Classifications		
CLASSIF	All Classifications	CLASSIF:(B01D 29/00)
CPC	Cooperative Patent Classification	CPC:(B01D 29/00)
FICLASSIF	File Index classification	FICLASSIF:"G09G*")
IC	International Class	IC:(A or C07 or "G01N33" or "G06K 21/00")
ICF	Main International Class	ICF:(A or C07 or "G01N33" or "G06K 21/00")
ICI	International Class Inventive	ICI:(A or C07 or "G01N33" or "G06K 21/00")
ICN	International Class Non Inventive	ICN:(A or C07 or "G01N33" or "G06K 21/00")
IC_EX	Exact IPC code	IC_EX:(C12Q) IC_EX:"A61K 38/08")
CPC_EX	Exact CPC code	CPC_EX:(B01D 29/00)
Inventor		
IADC	Inventor Nationality	IADC:(US)
IN	Inventor Name	IN:(HAMILTON, Janice)
INA	Inventor All Data	INA:(HAMILTON, Janice US California)

# ANNEX

## FIELD CODES

Numbers		
ALLNUM	All Numbers and IDs	The entered value is searched against the application number, the PCT publication number, the national publication number and the priority number ALLNUM:(US200500*) ALLNUM:(23412 CU) ALLNUM:(2007 8603 MX)
GN	Grant Number	GN:(US7659097)
PRIORPCTAN	Prior PCT Application Number	PRIORPCTAN:(US2000*)
PRIORPCTWO	Prior PCT WO Number	PRIORPCTWO:(WO2000*)
National Phase		
NPA	National Phase All Data	NPA:((US 2002*))
NPAN	National Phase Application Number	NPAN:(JP-1996515*)
NPCC	National Phase Office Code	NPCC:(JP)
NPED	National Phase Office Code and Entry Date	NPED:(US-200012*)
NPEDD	National Phase Entry Date	NPEDD:(2010) NPEDD:(201007) NPEDD:(20100715) NPEDD:([01.01.2000 TO 01.01.2005])
NPET	National Phase Entry Type	NPET:(US-E) NPET:(JP-P) NPET:(DE-G)
NPL		
AU	Author	Author, Hyojin Kim for example, of the article. AU: Hyojin Kim
CTR	Only NPL information search criteria	CTR: ZZ
DP	Publication Date	Publication date, December 30th, 2020 for example. DP:(30.12.2020)

# ANNEX

## FIELD CODES

DTY: NPL	Latest Kind code	All NPL the records DTY: NPL
EN_AB	English Abstract	Information in the abstract of the article, electric bicycle for example. EN_AB:(electric bicycle)
EN_DE	English Description	Information in the article, electric bicycle for example. EN_DE:(electric bicycle)
EN_TI	English Title	Information in the title of article, electric bicycle for example. EN_TI: (electric bicycle)
IC	International Class	Code IPC, G06F for example (assigned by an AI procedure) IC: G06F
JO	Publisher of the article	JO: (British Journal of Cancer)
PN	Publication Number	PN: 10.1038/s41416-019-0673-5
PU	Source of NPL	PU:(IEEE)
Priority		
NP	Priority Number	NP:(2003*)
PCN	Priority Country	PCN:(US)
PD	Priority Date	PD:(2010) PD:(201007) PD:(20100715) PD:([01.01.2000 TO 01.01.2005])
PI	Priority All Data	PI:(2003 US)

# ANNEX

## FIELD CODES

Publication		
DP	Publication Date	DP:(2010) DP:(201007) DP:(20100715) DP:([01.01.2000 TO 01.01.2005])
LGP	Publication Language	LGP:(en) LGP:(ja)
PN	Publication Number	Publication number with or without the country code, in various forms. PN:(CU 341*) PN:(JP1997123456) PN:(JP9123456) PN:(JP09123456) PN:(JPH9123456) PN:(JPH9-123456)
PNID	Unambiguous National Publication Number	PNID:(11592758)
WO	WIPO Publication Number	WO:(2001/000012)
Legal Representative		
RAD	Legal Representative Address	RAD:(New York)
RCN	Legal Representative Country	RCN:(US)
RP	Legal Representative Name	RP:(López, Pedro)
RPA	Legal Representative All Data	RPA:(Smith, John NY New York)
Arabic		
AR_AB	Arabic Abstract	AR_AB:(50~"سيارة كهربائية") AR_AB:([* TO *])
AR_ALL	Arabic All	AR_ALL:(50~"سيارة كهربائية") AR_ALL:([* TO *])
AR_ALLTXT	Arabic Text	AR_ALLTXT:(50~"سيارة كهربائية") AR_ALLTXT:([* TO *])

# ANNEX

## FIELD CODES

AR_CL	Arabic Claims	(سيارة كهربائية"50~" AR_CL:[* TO *])
AR_DE	Arabic Description	(سيارة كهربائية"50~" AR_DE:[* TO *])
AR_TI	Arabic Title	"سيارة كهربائية"50~" AR_TI:[* TO *])
<b>Danish</b>		
DA_AB	Danish Abstract	DA_AB:(elbil) DA_AB:[* TO *])
DA_ALL	Danish All	DA_ALL:(elbil) DA_ALL:[* TO *])
DA_ALLTXT	Danish Text	DA_ALLTXT:(elbil) DA_ALLTXT:[* TO *])
DA_CL	Danish Claims	DA_CL:(elbil) DA_CL:[* TO *])
DA_DE	Danish Description	DA_DE:(elbil) DA_DE:[* TO *])
DA_TI	Danish Title	DA_TI:(elbil) DA_TI:[* TO *])
<b>German</b>		
DE_AB	German Abstract	DE_AB:(Elektroauto) DE_AB:[* TO *])
DE_ALL	German All	DE_ALL:(Elektroauto) DE_ALL:[* TO *])
DE_ALLTXT	German Text	DE_ALLTXT:(Elektroauto) DE_ALLTXT:[* TO *])
DE_CL	German Claims	DE_CL:(Elektroauto) DE_CL:[* TO *])
DE_DE	German Description	DE_DE:(Elektroauto) DE_DE:[* TO *])
DE_TI	German Title	DE_TI:(Elektroauto) DE_TI:[* TO *])

# ANNEX

## FIELD CODES

English		
EN_AB	English Abstract	EN_AB:"electric car"~50)
EN_ALL	English All	EN_ALL:"electric car"~50) EN_ALL:(car or truck)
EN_ALLTXT	English Text	EN_ALLTXT:"electric car"~50) EN_ALLTXT:(car or truck)
EN_CL	English Claims	EN_CL:"electric car"~50) EN_CL:(car or truck)
EN_DE	English Description	EN_DE:"electric car"~50) EN_DE:(car or truck)
EN_TI	English Title	EN_TI:"electric car"~50) EN_TI:(car or truck)
Spanish		
ES_AB	Spanish Abstract	ES_AB:"coche eléctrico"~50) ES_AB:[* TO *])
ES_ALL	Spanish All	ES_ALL:"coche eléctrico"~50) ES_ALL:[* TO *])
ES_ALLTXT	Spanish Text	ES_ALLTXT:"coche eléctrico"~50) ES_ALLTXT:[* TO *])
ES_CL	Spanish Claims	ES_CL:"coche eléctrico"~50) ES_CL:[* TO *])
ES_DE	Spanish Description	ES_DE:"coche eléctrico"~50) ES_DE:[* TO *])
ES_TI	Spanish Title	ES_TI:"coche eléctrico"~50) ES_TI:[* TO *])
French		
FR_AB	French Abstract	FR_AB:"voiture electrique"~50) FR_AB:(voiture ou camion)
FR_ALL	French All	FR_ALL:"voiture electrique"~50) FR_ALL:(voiture ou camion)
FR_ALLTXT	French Text	FR_ALLTXT:"voiture electrique"~50) FR_ALLTXT:(voiture ou camion)

# ANNEX

## FIELD CODES

FR_CL	French Claims	FR_CL:(“voiture electrique”~50) FR_CL:(voiture ou camion)
FR_DE	French Description	FR_DE:(“voiture electrique”~50) FR_DE:(voiture ou camion)
FR_TI	French Title	FR_TI:(“voiture electrique”~50) FR_TI:(voiture ou camion)
<b>Hebrew</b>		
HE_AB	Hebrew Abstract	(מכונית חשמלית”~50) HE_AB:[* TO *])
HE_ALL	Hebrew All	(מכונית חשמלית”~50~)(“voiture ou camion)
HE_ALLTXT	Hebrew Text	(מכונית חשמלית”~50~50~)(“voiture ou camion)
HE_CL	Hebrew Claims	(מכונית חשמלית”~50~50~)(“voiture ou camion)
HE_DE	Hebrew Description	(מכונית חשמלית”~50~50~)(“voiture ou camion)
HE_TI	Hebrew Title	(מכונית חשמלית”~50~50~)(“voiture ou camion)
<b>Italian</b>		
IT_AB	Italian Abstract	IT_AB:(“macchina elettrica”~50) IT_AB:[* TO *])
IT_ALL	Italian All	IT_ALL:(“macchina elettrica”~50) IT_ALL:[* TO *])
IT_ALLTXT	Italian Text	IT_ALLTXT:(“macchina elettrica”~50) IT_ALLTXT:[* TO *])
IT_CL	Italian Claims	IT_CL:(“macchina elettrica”~50) IT_CL:[* TO *])
IT_DE	Italian Description	IT_DE:(“macchina elettrica”~50) IT_DE:[* TO *])
IT_TI	Italian Title	IT_TI:(“macchina elettrica”~50) IT_TI:[* TO *])

# ANNEX

## FIELD CODES

Japanese		
JA_AB	Japanese Abstract	JA_AB:(電気自動車) JA_AB:[* TO *])
JA_ALL	Japanese All	JA_ALL:(電気自動車) JA_ALL:[* TO *])
JA_ALLTXT	Japanese Text	JA_ALLTXT:(電気自動車) JA_ALLTXT:[* TO *])
JA_CL	Japanese Claims	JA_CL:(電気自動車) JA_CL:[* TO *])
JA_DE	Japanese Description	JA_DE:(電気自動車) JA_DE:[* TO *])
JA_TI	Japanese Title	JA_TI:(電気自動車) JA_TI:[* TO *])
Korean		
KO_AB	Korean Abstract	KO_AB:(전기차) KO_AB:[* TO *])
KO_ALL	Korean All	KO_ALL:(전기차) KO_ALL:[* TO *])
KO_ALLTXT	Korean Text	KO_ALLTXT:(전기차) KO_ALLTXT:[* TO *])
KO_CL	Korean Claims	KO_CL:(전기차) KO_CL:[* TO *])
KO_DE	Korean Description	KO_DE:(전기차) KO_DE:[* TO *])
KO_TI	Korean Title	KO_TI:(전기차) KO_TI:[* TO *])
Polish		
PL_AB	Polish Abstract	PL_AB:"samochód elektryczny"~50) PL_AB:[* TO *])
PL_ALL	Polish All	PL_ALL:"samochód elektryczny"~50) PL_ALL:[* TO *])
PL_ALLTXT	Polish Text	PL_ALLTXT:"samochód elektryczny"~50) PL_ALLTXT:[* TO *])

# ANNEX

## FIELD CODES

PL_CL	Polish Claims	PL_CL:(“samochód elektryczny”~50) PL_CL:([* TO *])
PL_DE	Polish Description	PL_DE:(“samochód elektryczny”~50) PL_DE:([* TO *])
PL_TI	Polish Title	PL_TI:(“samochód elektryczny”~50) PL_TI:([* TO *])
<b>Portuguese</b>		
PT_AB	Portuguese Abstract	PT_AB:(“carro elétrico”~50) PT_AB:([* TO *])
PT_ALL	Portuguese All	PT_ALL:(“carro elétrico”~50) PT_ALL:([* TO *])
PT_ALLTXT	Portuguese Text	PT_ALLTXT:(“carro elétrico”~50) PT_ALLTXT:([* TO *])
PT_CL	Portuguese Claims	PT_CL:(“carro elétrico”~50) PT_CL:([* TO *])
PT_DE	Portuguese Description	PT_DE:(“carro elétrico”~50) PT_DE:([* TO *])
PT_TI	Portuguese Title	PT_TI:(“carro elétrico”~50) PT_TI:([* TO *])
<b>Russian</b>		
RU_AB	Russian Abstract	RU_AB:(электромобиль) RU_AB:([* TO *])
RU_ALL	Russian All	RU_ALL:(электромобиль) RU_ALL:([* TO *])
RU_ALLTXT	Russian Text	RU_ALLTXT:(электромобиль) RU_ALLTXT:([* TO *])
RU_CL	Russian Claims	RU_CL:(электромобиль) RU_CL:([* TO *])
RU_DE	Russian Description	RU_DE:(электромобиль) RU_DE:([* TO *])
RU_TI	Russian Title	RU_TI:(электромобиль) RU_TI:([* TO *])

# ANNEX

## FIELD CODES

Swedish		
SV_AB	Swedish Abstract	SV_AB:(elbil) SV_AB:[* TO *])
SV_ALL	Swedish All	SV_ALL:(elbil) SV_ALL:[* TO *])
SV_ALLTXT	Swedish Text	SV_ALLTXT:(elbil) SV_ALLTXT:[* TO *])
SV_CL	Swedish Claims	SV_CL:(elbil) SV_CL:[* TO *])
SV_DE	Swedish Description	SV_DE:(elbil) SV_DE:[* TO *])
SV_TI	Swedish Title	SV_TI:(elbil) SV_TI:[* TO *])
Vietnamese		
VN_AB	Vietnamese Abstract	VN_AB:"xe điện"~50) VN_AB:[* TO *])
VN_ALL	Vietnamese All	VN_ALL:"xe điện"~50) VN_ALL:[* TO *])
VN_ALLTXT	Vietnamese Text	VN_ALLTXT:"xe điện"~50) VN_ALLTXT:[* TO *])
VN_CL	Vietnamese Claims	VN_CL:"xe điện"~50) VN_CL:[* TO *])
VN_DE	Vietnamese Description	VN_DE:"xe điện"~50) VN_DE:[* TO *])
VN_TI	Vietnamese Title	VN_TI:"xe điện"~50) VN_TI:[* TO *])
Chinese		
ZH_AB	Chinese Abstract	ZH_AB:(电动汽车) ZH_AB:[* TO *])
ZH_ALL	Chinese All	ZH_ALL:(电动汽车) ZH_ALL:[* TO *])
ZH_ALLTXT	Chinese Text	ZH_ALLTXT:(电动汽车) ZH_ALLTXT:[* TO *])

# ANNEX

## FIELD CODES

ZH_CL	Chinese Claims	ZH_CL:(电动汽车) ZH_CL:[* TO *])
ZH_DE	Chinese Description	ZH_DE:(电动汽车) ZH_DE:[* TO *])
ZH_TI	Chinese Title	ZH_TI:(电动汽车) ZH_TI:[* TO *])

The most up-to-date information about the supported field codes in the PATENTSCOPE search service is available here:

<https://patentscope.wipo.int/search/en/help/fieldsHelp.jsf>