



PATENTSCOPE
Exercise book

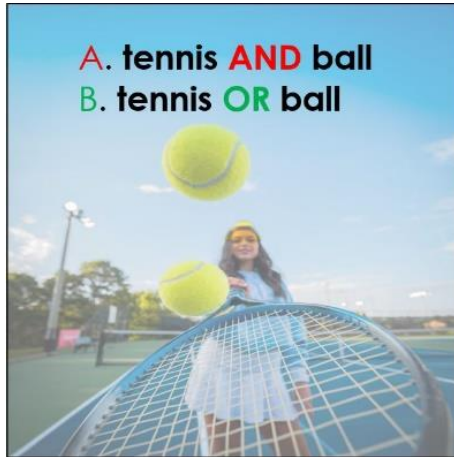
2022

Disclaimer: this is an exercise book; for explanations on how to use PATENTSCOPE, please refer to the User's Guide available in the Help menu here patentscope.wipo.int. The results shown in the *Solutions* part might be slightly different depending on when you do the exercises as the features of PATENTSCOPE often change and more documents become available every week. If you have any questions, please contact patentscope@wipo.int.

Exercises

I. OPERATOR EXERCISES

1. Which query will trigger the highest number of results?



2. List of all the operators that are supported in PATENTSCOPE
3. Will query A and Query B produce the same number of results?



4. How to you search for the exact phrase below *cancer biomarker*?

ds and compositions for detection of colorectal cancer. The method of detection of colorectal cancer in a subject can include a) measuring the level of expression of one or more colorectal cancer biomarker genes listed in Table 1 (Panel A) in a biological sample from the subject; b) comparing the measured expression level of the two or more colorectal cancer biomarker genes in a control sample, wherein a difference in the measured expression level of the two more genes indicates that the subject has colorectal cancer. The two or more colorectal cancer biomarker genes can be selected from the colorectal cancer biomarker genes selected from the group consisting of AK024621, NR_002569, TC002_12_0001049-XLOC_12_005952, AK0222857, AK045148, NR_002281, D1THJMT00000051727, ENST00000395621, BC103936, NM_030876, ENST00000390296, TC005_00014676-XLOC_006946, TC006_00014676-XLOC_004927, ENST00000406390.

1.1. **CANCER BIOMARKERS**
measuring the level of expression of one or more colorectal cancer biomarker genes listed in Table 1 (Panel A) in a biological sample from the subject; b) comparing the measured expression level of the two or more colorectal cancer biomarker genes in a control sample, wherein a difference in the measured expression level of the two more genes indicates that the subject has colorectal cancer. The two or more colorectal cancer biomarker genes can be selected from the colorectal cancer biomarker genes selected from the group consisting of Stage 1 (T1), Stage 2 (T2), Stage 3 (T-3), and Stage 4 (T4). The colorectal cancer can be a colorectal adenocarcinoma, a leiomyosarcoma, melanoma, a squamous cell carcinoma, or a mucinous carcinoma.

1) of determining whether a subject is at risk for colorectal cancer. The method of determining whether a subject is at risk for colorectal cancer can include a) measuring the level of expression of one or more colorectal cancer biomarker genes listed in Table 1 (Panel A) in a biological sample from the subject; b) comparing the measured expression level of the two or more colorectal cancer biomarker genes in a control sample, wherein a difference in the measured expression level of the two or more genes in the control sample indicates that the subject is at risk for colorectal cancer. The two or more colorectal cancer biomarker genes can be selected from the colorectal cancer biomarker genes listed in Panel B, Panel C, Panel D, or Panel E. The two or more colorectal cancer biomarker genes are selected from the group consisting of AK0222857, NR_030830, NM_002165, NM_002165, ENST00000395621, ENST00000395621.

5. Which operator/s allows you to make sure that 2 keywords will appear next to each other in the result list?
6. Which query will return the most relevant results for the object in the picture below?



7. Documents about what type of ovens will not be included in the result list with the query below:



II. FIELD EXERCISES

1. Which field/s should you use to:
 - a. retrieve documents in Japanese
 - b. search information in all the parts of Chinese documents
 - c. look for a precise IPC code
 - d. look for an applicant
 - e. retrieve information in the Spanish claims
 - f. search for all the information related to national phase entry data?
 - g. search information in the text in French
 - h. retrieve kind codes
2. What is the difference between:
 - a. The field IC and the field IC_EX?
 - b. The field EN_ALL and the field EN_ALLTXT
 - c. The columns (highlighted in yellow) below Countries and Offices in the Analysis

Countries		Offices		Applicants	IPC code	CPC code	Publication Dates	Kind code	
China	31,287,815	China	32,425,381	SAMSUNG ELECTRONICS CO LTD	G06F	wRP 43/00	1973	49,876,662	
Japan	19,044,258	Japan	19,294,838	SIEMENS AG	A61K	wRP 35/00	1974	754,048	
United States of America	13,572,853	United States of America	15,488,298	SONY CO	H01L	yDZ 60/10	1975	798,955	
Germany	8,341,091	Germany	8,291,894	LG ELECTRONICS INC	G01N	wRP 28/00	1976	838,910	
Republic of Korea	4,238,000	Republic of Korea	5,240,977	HITACHI LTD	H04N	2,277,075	wfK	387,094	
PCT	4,389,293	European Patent Office	4,394,140	CANON INC	H04L	2,917,989	wRP 25/00	1978	780,319
European Patent Office	4,038,421	PCT	4,388,297	MITSUBISHI ELECTRIC CO	A61P	2,041,547	gRP	297,452	
France	2,491,873	Canada	2,884,347	INTERNATIONAL BUSINESS MACHINES CO	G07D	1,878,481	wRP	270,891	
Canada	2,488,239	France	2,483,873	MATSUSHITA ELECTRIC IND CO LTD	B01D	1,840,203	h04	269,475	
United Kingdom	2,454,500	United Kingdom	2,453,247	HUAMEI TECH CO LTD	B65D	1,347,813	wRP 19/00	243,192	
Australia	1,824,924	Australia	1,831,034	SEIKO EPSON CO	G02B	1,435,759	wRP 19/00	233,578	
Spain	1,646,810	Spain	1,648,188	NEC CO	B29C	1,414,164	yDZ 10/00	233,000	
Russian Federation (USPTO office)	1,453,959	Russian Federation	1,505,148	TOSHIBA CO	C07C	1,339,885	wfK 38/00	222,809	
		Russia	1,470,693	QUALCOMM INC	C07N	1,271,824	kDZ 2002/100	221,201	

- Which fields should you use to search for published PCT applications that entered national phase on China in 2020?
- Which fields should you use to retrieve patents/applications that have a German patent as a priority and this IPC code C10L1/00?
- Which fields should you use to find all PCT applications with USPTO as PCT search authority?
- Which fields have to be used to search the number of PCT applications from Poland in 2019?
- Which fields should you use to retrieve PCT patent applications from France seeking protection in USA in year 2012?
- Which fields should you use to search for PCT applications which application date is between 2008 and 2011 and the national phase office is China?

III. SEARCH EXERCISES WITH THE SIMPLE SEARCH INTERFACE

- Using the Simple search interface, you would like to find:
 - documents about microchips
 - document published on June 30, 2022
 - document having publication number 2017134139
 - documents about electric bicycle
 - documents about cars or trucks
 - document having the keywords cars and trucks in the title/abstract
 - document having the IPC code H04L1/00
 - document belonging to Apple
 - documents having voiture (car in French)
- In the Simple search, select the PCT collection, perform and save the 3 following searches:
 - «bicycle frame» in the Front page
 - Shimano in the Names
 - B62K19/40
- Using the Full-text field in the Simple search, how do you search for vent (wind in FR) and vent (outlet in English)?
- Search this document number: WO/2022/186847

III. SEARCH EXERCISES WITH THE FIELD COMBINATION INTERFACE

1. Using the Field Combination interface, how many results do you find when combining the following fields and search terms with the operator AND:
 - a. Publication Date: 2018
 - b. Applicant nationality: China
 - c. English abstract: support
 - d. International Patent Classification: H04W
 - e. Applicant name: huawei
2. How many PCT applications have licensing availability information for publication year 2019?
3. Build a search to look for both patent and non-patent information about cancer in English using the title field.
4. For the Applicant Mars what is the difference in the number of results when grouped by family and not grouped by family?
5. Can you build the following query using the Field Combination?
English abstract: car OR English title: car AND publication date: 2022

IV. SEARCH EXERCISES WITH THE ADVANCED SEARCH INTERFACE

1. Using the Advanced search interface, build a query to retrieve PCT applications having licensing availability information and third party observation.
2. Using the Advanced search interface, build a query to retrieve documents having:
 - a. the key word solar or the combination of wind/turbine in the English description
 - b. cancer biomarker in the English description
3. Using the Advanced search interface, build the following queries to retrieve documents:
 - a. From the national collection of US, having electric bicycle in the English Claims and published between 2018 and now.
 - b. Add IPC for *electricity*;
generation, conversion;
dynamoelectric machines
4. Perform the following query:
EN_ALL: semiconductor
Explain what could be an issue if your goal is to search documents containing the keyword semiconductor as part of the invention
5. Build a query to combine the keywords *solar cell* and its synonym *photovoltaic cell*, *aluminum foil* and its alternative spelling *aluminium foil* and *metal foil* and *nanoparticle ink* and its related term *nanoparticle solution* or *nanoparticle suspension*. Add the relevant IPC.
6. Perform the 2 following queries and explain the difference:
 - a. EN_TI:(electric bicycle)
 - b. EN_TI: electric bicycle

V. RESULT LIST EXERCISES













1. In the Simple search enter in the Front page field, the following query:
hearing AND aid:
 - a. Limit your result to the PCT collection
 - b. Sort by Publication Date Descending
 - c. Display the results only with images
2. Download the result list of the query Shimano in the applicant field.
3. For the query B62K19/40 in the international classification field, sort the result by ascending publication date and add the first 3 applications to the Watched list.
4. Perform the following search to find documents containing in the English claims the keyword *bridge* and the keywords *vertical* or *horizontal*
 - a. sort the results by publication date descending
 - b. group the results by families
 - c. include non-patent literature
5. Perform the following search to find documents containing in the English claims the keyword *bridge* and the keywords *vertical* or *horizontal*
 - a. Narrow down by publication date: 2012
 - b. Narrow down by published examined patent application (2nd level)
 - c. To which collection/s do the results belong to?
 - d. Go back to the initial result list (keeping family info and NPL)
 - e. Add the column «offices», what is the difference between this new column and «countries»

VI. STEMMING EXERCISES

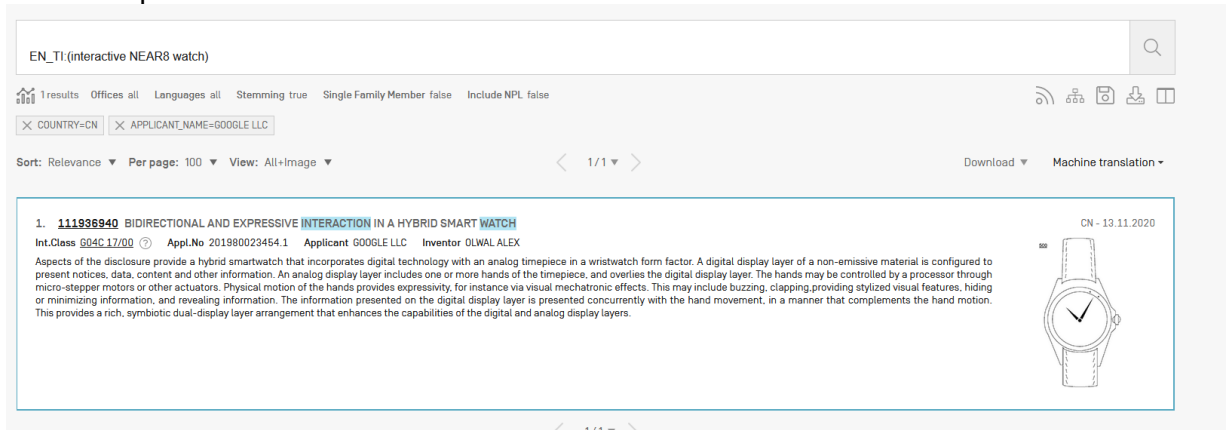
1. What is the difference between **support stemmed** and **support***?
2. Is using **elect*** is good idea?
3. Using the keyword **analyzer**, will **analysis** be included in the result list using stemming?
4. When **car** is stemmed, what other keyword/s will be included in the result list?
5. To obtain cellular from cell, should stemming or wildcard be used?
6. When you use *electricity* in your searches in PATENTSCOPE, what keywords will be included by default in the documents in the result list?

VII. MISCELLANEOUS EXERCISE

1. Subscribe to the RSS feed for the query «bicycle frame» in the English abstract.
2. Build following queries in the English all text and with a publication date in 2019

- a.  +  +  OR  +  + 
- b.  OR  OR  OR  +  + 

3. Define the steps to obtain the result below:



EN_TI:(interactive NEAR8 watch)

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


COUNTRY=CN APPLICANT_NAME=GOOGLE LLC

Sort: Relevance Per page: 100 View: All+Image

1. **111936940** BIDIRECTIONAL AND EXPRESSIVE **INTERACTION** IN A HYBRID SMART **WATCH**
 Int.Class **G04C 17/00** Appl.No 201980023454.1 Applicant **GOOGLE LLC** Inventor **OLWAL ALEX**

Aspects of the disclosure provide a hybrid smartwatch that incorporates digital technology with an analog timepiece in a wristwatch form factor. A digital display layer of a non-emissive material is configured to present notices, data, content and other information. An analog display layer includes one or more hands of the timepiece, and overlies the digital display layer. The hands may be controlled by a processor through micro-stepper motors or other actuators. Physical motion of the hands provides expressivity, for instance via visual mechatronic effects. This may include buzzing, clapping, providing stylized visual features, hiding or minimizing information, and revealing information. The information presented on the digital display layer is presented concurrently with the hand movement, in a manner that complements the hand motion. This provides a rich, symbiotic dual-display layer arrangement that enhances the capabilities of the digital and analog display layers.

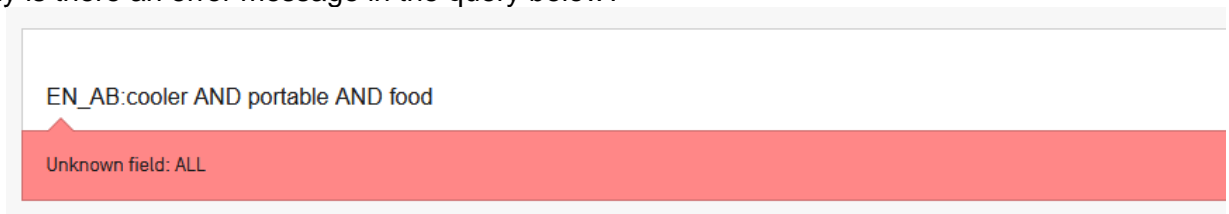
CN - 13.11.2020



4. How many records of NPL are currently available in PATENTSCOPE? Can you name one or more publisher/s?

5. Perform a search in the field Chinese claim about nail clipper.

6. Why is there an error message in the query below?



EN_AB:cooler AND portable AND food

Unknown field: ALL

7. List the benefits of being logged-in with a WIPO account when using PATENTSCOPE.

8. Enter “electric car” in CLIR, set the precision du highest level, edit the result to keep only the Chinese and Korean results and translate the results that are not in English in the result list into English.

9. Explain the differences between the Cross-Lingual Expansion (CLIR) and WIPOPearl.

10. How many PCT applications have third party observation in 2021?

11. Perform a search to retrieve documents about toy for children/infant

- select 3 published PCT application of 2022
- Add them to the Watched list

12. Transform the query below so that it is done in Spanish
 EN_CL: (“shaving head”) AND DP:2018

13. Search compound lactose and restrict the results to the claims
14. List the 3 top inventors for the color analyzing technology.
15. Using CLIR:
 - a. search for vessel
 - b. How can you make sure that all results are related to boats?

VIII. AMEND THE QUERY EXERCISES

1. ZH_AB:(机器人 OR 机械手 OR 机器人车 OR OR 水下机器 OR 先人)
2. EN_DE:(electric* OR elect* OR suppor* OR supp* OR stan* OR stand* OR found* OR carr* OR carri*)
3. FP:(water OR fluid) AND (support AND electric) OR hydrosupport)
4. EN_AB:(CHEM:(IKHGUXGNUITLKF-UHFFFAOYSA-N)) AND EN_AB:(MOLLUSCICIDE)
5. EN_CL:(CHEM:(OAKJQQAXSVQMHS-UHFFFAOYSA-N))
6. EN_AB:(apparatus NEAR4 blood AND pressure) – so that the search retrieves documents about apparatus for measuring blood pressure
7. CPC:PCT AND LI:1 and TPO:1 – so that the search retrieves documents having third party observations and licensing availability information
8. EN_DE:(SOLAR) OR (WIND AND TURBINE) – so that the search retrieves all keywords in the English description
9. EN_CL: (US national) AND (electric bicycle) – so that the search retrieves in the English claims documents about electric bicycles in the US nation collection
10. EN_CL: (electricity)(generation)(conversion)(dynamo electric machines)

IX. CHEMICAL SEARCHES EXERCISES

1. What can you search the following using chemical searches?
 - a. antibody sequence
 - b. CAS name
 - c. enantiomer
 - d. polymer
 - e. peptide
 - f. protein sequence
 - g. monomer
2. Search compound hydrazine and restrict the results to the claims
3. Combine the results of acetonitrile with IPC A61P 35/00

- 4 Search compounds ibuprofen, aspirin and paracetamol in 1 search query
5. Search maltose and restrict results to:
 - a. the applicant Novartis
 - b. from 2012 -2022
 - c. the collections of Colombia and Mexico
6. Search
 - a. metaldehyde + molluscicide in the English Abstract
 - b. replace molluscicide by the Japanese term in the Japanese abstract
7. Search by CAS number:
 - 77-68-9
 - 16874-12-7
 - 889947-54-0
8. Find enumerated Markush structures for ammonia
9. Build a query to retrieve documents containing glucose, fructose and methoxyethanol from applicant Henkel.