# PATENTSCOPE – Exercise booklet November 2023 –Hints

## *1. Chinese patent application and translation*

A. Find the relevant document. Search “Huawei” as applicant and 28th December 2011 as publication date. A number of hits are obtained, but only one with the correct keywords or inventor list. Translations into the English and Korean languages can be obtained from the relevant EP, US and KR family members. Other languages can be obtained via CLIR.

## *2. Breeding tomatoes*

A. Search statement EN_ALL:Breeding Tomatoes Reduced Water Content. There is no need to include “Method” it´s a redundant term and “having a” is non definitive. The document could also be retrieved directly using country code IL and the filing date. The priority document is IL131509 the PCT family publication is WO/2001/013708

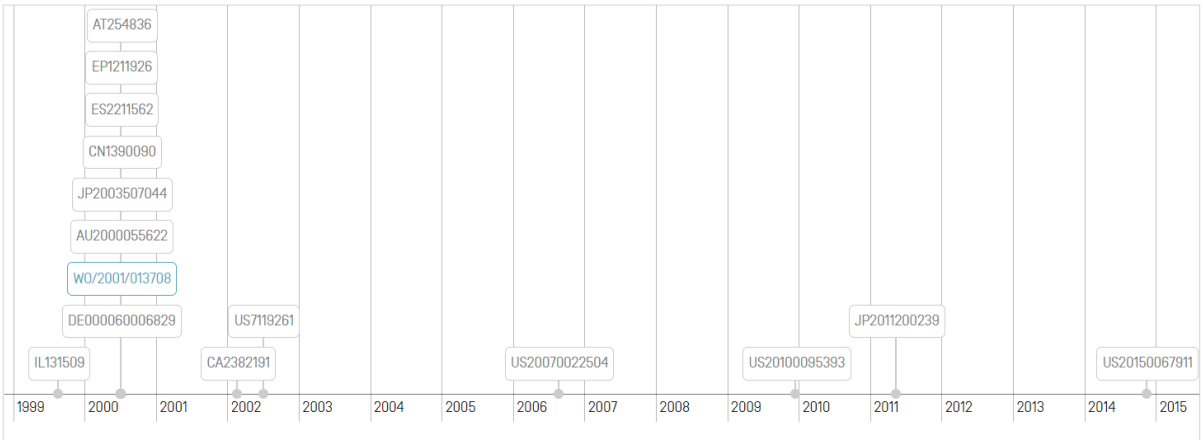
B. Entry into national phase

PermaLink

Available information on National Phase entries [more information]

| Office | Entry Date | National Number | National Status |
|---|---|---|---|
| China | 04.07.2000 | 00814490.7 | |
| Canada | 19.02.2002 | 2382191 | |
| Australia | 01.03.2002 | 55622/00 | Granted 29.09.2005 |
| European Patent Office | 07.03.2002 | 2000940724 | Published 12.06.2002<br>Granted 26.11.2003<br>Withdrawn 30.07.2018 |
| United States of America | 01.07.2002 | 10069389 | |

C. The patent family picture




D. The European Patent Application was withdrawn *with effect from* 30.7.2018

## *3.Immunowork*

Search “Immunowork” as applicant name

There is only one patent family

A. The PCT family member is WO2018031947(A1)
B. The other family members are
CN1098 91245(A) CN109891245(B) EP3497542(A1) EP3497452(A4) JP2019524884 (A) JP7303107(B2) US11266717(B2) US2019183696 US2022193188 (A1)
C. Download JP2019524884 or CLIR

## *4. Novel Prize blue laser*

A. Search for “Laser” in the title or abstract. Search for each inventor name separately

(i) “Laser” and (“Isamu Akasaki”) or (“Akasaki Isama”) To remove ambiguous results include applicant names (“Meijo University” or “Nagoya University”)

(ii) “Laser” and (“Hiroshi Amano”) or (“Amano Hiroshi”). To remove ambiguous results include applicant name (“Nagoya University”)

(iii) “Laser”and (“Shuji Nakamura”) or (“Nakamura Shuji”) . To remove ambiguous results include applicant name (“University of California”).

There may be co-inventorships in the hitlists from each of A(i), A(ii) and A(iii)

To find the pairs of co-inventorships combine the searches as follows

A(i) + A(ii)
A(i) + A(iii)
A(ii) + A(iii)

B. To narrow the search results to blue lasers, repeat the above with keywords “blue laser”

## *5. NotPla*

A. Search for “NotPla” as applicant.
B. The inventors named are Pierre-Yves Paslier and Rodrigo Garcia Gonzalez
C.

| Publication | Title |
|---|---|
| ES2945415 (T3) | METHOD OF ENCAPSULATING LIQUID PRODUCTS |
| US2023080039 (A1) | PACKAGING ITEM |
| WO2023084233 (A1) | SINGLE-USE PACKAGING |
| WO2023084239 (A1) | NEW SINGLE-USE PACKAGING |

D. Search for inventor names “Pierre-Yves Paslier” AND “Rodrigo Garcia Gonzalez“ and all variations
E. Their earlier company is Skipping Rocks Lab Ltd and the PCT application is WO2020065270 (A1)

## *6. Nobel Prize CRISPr*

A. Search “Charpentier” or “Emmanuelle Charpentier” or “E. Charpentier” or “Charpentier E” or “Charpentier Emmanuelle” as inventor name
B. Search “Doudna” or “Jennifer Doudna” or “Jennifer A. Doudna” or “Doudna Jennifer” or “Doudna Jennifer A.”
C. Combine search statements A and B or filter lists A and B to include both names and variants
D. Inspect the titles and abstracts of the patents you have found

## *7. Hoverboard*

A. Search inventor name “Michele Palladino” or “Palladino Michele” AND country code CA. CA2187678 (A1) CA2187678 (C)
B. Search “hoverboard” AND “magnet*” (truncated) as keywords in title and abstract

| | |
|---|---|
| KR20220139149 (A) | Magnetic levitation module for electr... |
| KR20220139151 (A) | Magnetic levitation module for electr... |
| US2019275897 (A1) | Transportation Pathway And Method Of ... |
| CN106536003 (A) | Hoverboard |
| US9263974 (B1) | Hover engine for a hoverboard which g... |
| US2015175031 (A1) | HOVERBOARD |

C. Search inventor name “Ameri Dion” or “Dion Ameri” and “AU” as country code: AU2022200270 (A1) “Aladdins Electronic Hoverboard”

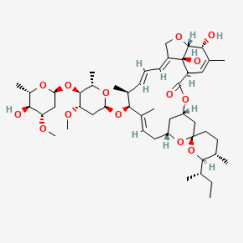
D. Not magic, just compressed air.

## *8. Parasitic diseases*

A. Search for “William C. Campbell “ as inventor (this is important there is a William R Campbell working in a related field) combine this with MERCK as applicant

B. Search for “Satoshi Omura” or Omura Satoshi (no diacritic) combine with IPC A61P 33/10 anthelminthics

C. Ivermectin

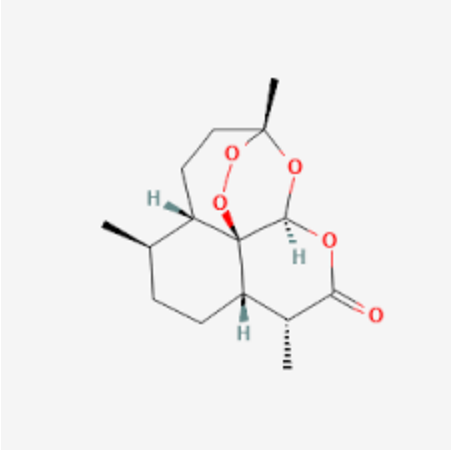


D.

| | |
|---|---|
| **SMILES String** | CCC(C)C1OC7(CCC1C)CC4CC(CC=C(C)C(OC3CC(OC)C(OC2CC(OC)C(O)C(C)O2)C(C)O3)C(C)C=CC=C5COC6C(O)C(=CC(C(=O)O4)C56O)C)O7 |
| **InChI** | InChI=1S/C48H74O14/c1-11-25(2)43-28(5)17-18-47(62-43)23-34-20-33(61-47)16-15-27(4)42(26(3)13-12-14-32-24-55-45-40(49)29(6)19-35(46(51)58-34)48(32,45)52)59-39-22-37(54-10)44(31(8)57-39)60-38-21-36(53-9)41(50)30(7)56-38/h12-15,19,25-26,28,30-31,33-45,49-50,52H,11,16-18,20-24H2,1-10H3 |
| **InChIKey** | AZSNMRSAGSSBNP-UHFFFAOYSA-N |

E. Search “Youyou” or “Tu youyou” or “ Youyou Tu” as inventor, combine with IPC A61P 33/06 (antimalarials)

F. Artemisinin



G.

- Artemisinin SMILES O=C3O[C@@H]4O[C@@]1(OO[C@@]42[C@@H](CC1)[C@H](C)CC[C@H]2[C@H]3C)C
- Artemisinin InChi InChI=1S/C15H22O5/c1-8-4-5-11-9(2)12(16)17-13-15(11)10(8)6-7-14(3,18-13)19-20-15/h8-11,13H,4-7H2,1-3H3/t8-,9-,10+,11+,13-,14-,15-/m1/s1 ✓
- Key:BLUAFEHZUWYNDE-NNWCWBAJSA-N

## *9. Outboard motor*

A. Use the keywords available especially “outboard” “motor or engine” “electric*” integrat*” AND “SI” as country code. The Slovenian patent application is SI26066 (A) French translation via CLIR
B. The corresponding PCT document is WO2022045986 (A1)
C. REMIGO PROIZVODNJA IN TRGOVINA d.o.o

## *10. Weighing biomolecules with light*

A. Search “Interferom* Scatt* Microscop*” or ISCAT in title or abstract
B. Repeat the search in A. above with “mass” in the description. The term mass photometry can be found.
C. Search A and B above with “Oxford” as applicant. The small British company is Refeyn

## *11. Sustainable cast products*

The WIPO web page is very informative, but does not directly enable the patent picture to be established. However the cited application number PCT/PH2003/000016 offers a way in. From this it can be deduced that the Delantars file as inventors as well as applicants. Pedro Dalantar files more frequently than Catherine Dalantar and he has co-filed with Huber Marketing Group and associated stakeholders.

It might be expected that there were patent applications filed under the company name “Nature´s legacy” or possibly under “Naturescast” but this is not the case. Relevant patents are only found with “Dalantar” as applicant and/or inventor names

| Publication | Title |
|---|---|
| PH12013000078 (A1) | MOLDED COARSE PARTICLE PRODUCT ESPECI... |
| PH12013000126 (A1) | MOLDED PAPER~BASED PRODUCT |
| US2009280273 (A1) | Decor Items |
| US2009214803 (A1) | Artificial Stone |
| US2009246467 (A1) | MOLDED COARSE PARTICLE PRODUCT WITH C... |
| US2004244329 (A1) | A REINFORCED CAST STONE OUTDOOR STRUC... |
| US2004209046 (A1) | MOLDED COARSE PARTICLE PRODUCT FOR US... |
| WO03053134 (A1) | A STONECAST PRODUCT REINFORCED AND AC... |
| WO03053645 (A1) | A STONECAST PRODUCT REINFORCED AND AC... |
| WO03053644 (A1) | A STONECAST PRODUCT REINFORCED AND AC... |

## *12. 4D printing*

A. Synonyms for suitable materials: “programmable material” shape memory (alloys, polymers, materials, metals) smart materials…..
B. B33Y and subgroups
C. A61F and subgroups
D. Search statement suggestion: 4D print* and (“program* material”) or (“shape memory (alloy* or polym* or material* or metal*)” or “smart material*” and B33Y and A27L

Hits can be refined with additional keywords such as “prosthe*” or “implant*” or “stent*”.

E. Search 4D as keyword, and “Stratasys” as applicant name. There should only be one hit with 3 inventor names. One of these inventors is a TED speaker (Find out in Google)

## *13. Sonochemistry*

A. B01J19/10, B01J19/28, B06B1/00, B06B3/00

B. From Wikipedia suggested keywords are:

- Ultrasound
- Sonication
- Ultrasonics
- ultrasonic homogenizer
- homogenizer
- Homogenization (chemistry)

- Sonoelectrochemistry
- (acoustic) cavitation

(Not all are relevant)

C. Search string
    a. Country code WO
    b. Keyword nano* truncated (nanometre, nanometer, nanoscale, nanosize(d)….)
    c. Partic* truncated (particle(s) particulate(s) particular….)
    d. IPC (B01J19/10 or B01J19/285 or B06B1/00 or B06B3/00) Boolean OR operator

This search results in a few hundred hits

D. Repeating the search in C. with Suslick as inventor results in a much reduced hit list

WO2005037709 (A2) 2005-04-28 WO2005037709 (A3) 2006-04-06

E. USA and UK
F. University of Illinois and University of Oxford (Oxford Innovation)
G. Predominantly Kenneth Suslik in the USA and predominantly Ken Suslick in the UK
H.
I. Search both possibilities of Prof. Suslick´s given name (“Ken or Kenneth”) and family name “Suslick”(no other search terms required) This results in a significant number of hits, and the most frequent IPC classifications retrieved include: G01N21, B01J19, C12P7, A61K9, A61K49, A61K47, G01N33, B22F9 In other words his inventions cover a wide range of technologies. Make sure that your hit lists only contain the correct Ken or Kenneth Suslick

## *14.Flood prediction*

A. G01W 1/10 Meterology , G01W 1/10 Devices for predicting weather conditions
B. G01W 1/14 G01W 1/14 Rainfall or precipitation gauges
C. G08B 31/00 Predictive alarm systems characterised by extrapolation or other computation using updated historic data.
D. G06Q 50/00 Systems or methods specially adapted for [..] utilities [..]
E. Suggested keywords “rain”, rainfall”, “runoff”, “run-off”, “weather forecast”, “predict*”, “flood*” , “disaster” “location or region” “river” “roads or streets” “computer” “data” “histor*”

Small selection of relevant patents

| Publication | Title |
|---|---|
| US2023161072 (A1) | Predictive Hydrological Impact Diagno... |
| WO2023276383 (A1) | RIVER FLOODING PREDICTION METHOD |
| US2017145648 (A1) | DISASTER PREVENTION SYSTEM |
| WO2012036368 (A1) | SYSTEM FOR MONITORING RAINFALL AND WA... |

## *15. Self-healing cement*

A.

1. Start by itemising what we know:
    a. Inventor nationality: Dutch, NL
    b. Address? Delft?
    c. The invention is about healing agents to promote self-healing of cement or concrete
    d. The healing agents are bacteria
    e. The bacteria feed on organic material such as calcium esters (organic acid salts, formate. acetate, lactate…..etc)
    f. The bacteria excrete calcium carbonate which heals the cracks
    g. The healing agent does not affect other properties of the material

2. Try to find a suitable classification – in this case it´s difficult but the general area of classification appears to be C04B 20/10 and C04B28

3. Try a combination of keywords
   "cement* or concret*" "self heal*" "healing agent" "bacteria" "calcium"
4. Search in title and abstract, search in description, finally search in claims.

B. The priority document for this invention is NL2004520 (C2). You may find English language family members as: WO 2011126361(A1), US 2016247658A1), EP2556037(A1). There are others, and some JP family members too.

## *16. Flight simulator*

A. First find appropriate IPC classes covering the relevant simulator technologies, such as: G09B9/02, G09B9/08, G09B9/12, G09B9/30, G09B9/307, 9/36. Look up the definitions of these classes to verify. Second, combine these classes with Boolean "OR". Lastly include key words "VR"or "virtual reality" and "flight" or "flying". This will result in a large number of hits more than 100

B. Refine the search in A. above in full text with additional keywords headset and train* and pilot. This makes the result set much more manageable, the relevant documents more obvious, and the irrelevant documents (for therapy or entertainment) can be discarded.