PATENT INVENTION -

- Searching for Patent Information
- Appendixes

TelecomParis Tech
March 12th 2024

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CHANGER L'ÉNERGIE ENSEMBLE

Contents

- **Questions ?**

- **Some reminders**

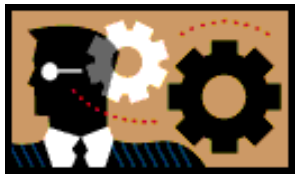
- **Patent classifications**
- **Databases**
- **Examples**
- **Strategies**

- **Appendixes**

KEEP IN MIND :

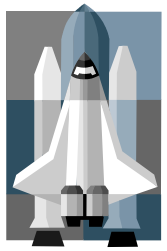
Problem:
"go to mars .. "

+



Inventive step:
"Um... how do you do it without obvious knowledge?"

=



A new and inventive solution

Protection: the patent

If there is an invention, there is an inventor: a physical person

- *The invention must be sufficiently described to be comprehensible and implementable by those skilled in the art:*

☞ *This is the pinciple of the dissemination of knowledge in exchange for protection granted by the State*

☞ *Patent application will be examined in scope and patentability criteria*

It is possible to file a patent for :

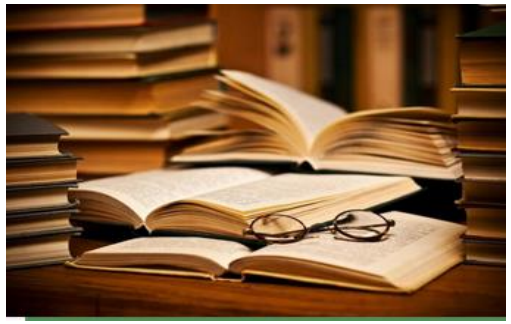
Products

Mechanical, chemical, electrical devices
Materials, Molecules

Processes

Methods of manufacture, control, operation ...

SOME FIGURES



- Source of Technical Information (prior art worldwide)
  - 70% of citations are in patents
  - 40% of solutions only in patents!

A current technical problem or a technical solution is (probably) included in patents

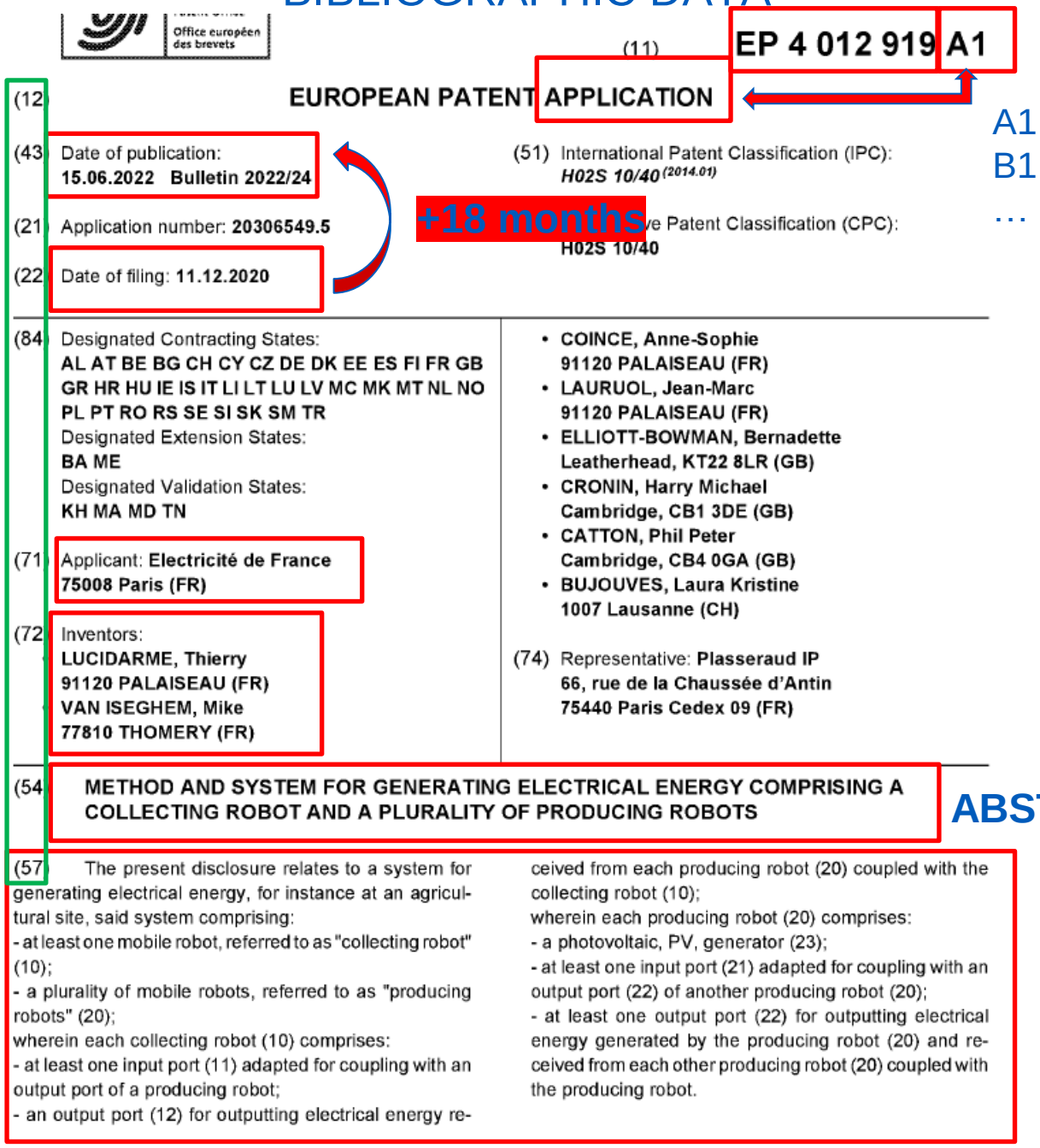
Numbers of patent application per year

	2000	2010	2020	2021	Increase rate (%) over 10 years (2010-2020)
China	25346	293066	1344817	146644	458,9
USA	164795	241977	269586	262244	111,4
Japan	387364	290081	227348	222452	78,4
South Korea	72831	131805	180477	186245	136,9
Germany	51736	47047	42260	39822	89,8
India	2206	8853	23141	26267	261,4
Russia	23377	28722	23759	19569	82,7
France	13870	14748	12771	13386	86,6
UK	22050	15490	11990	11592	77,4
Italy	7877	8877	10061	10281	113,3

Patent classification system

CHANGER L'ÉNERGIE ENSEMBLE

BIBLIOGRAPHIC DATA



(11) **EP 4 012 919 A1**

(12) **EUROPEAN PATENT APPLICATION**

A1 : application
B1 : patent
…

(43) Date of publication:
15.06.2022 Bulletin 2022/24

(21) Application number: **20306549.5**

(22) Date of filing: **11.12.2020**

+18 months

(51) International Patent Classification (IPC):
H02S 10/40 *(2014.01)*

…e Patent Classification (CPC):
H02S 10/40

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

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75008 Paris (FR)

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VAN ISEGHEM, Mike
77810 THOMERY (FR)
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  Cambridge, CB1 3DE (GB)
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  Cambridge, CB4 0GA (GB)
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(74) Representative: **Plasseraud IP**
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(54) **METHOD AND SYSTEM FOR GENERATING ELECTRICAL ENERGY COMPRISING A COLLECTING ROBOT AND A PLURALITY OF PRODUCING ROBOTS**

TITLE

(57) The present disclosure relates to a system for generating electrical energy, for instance at an agricultural site, said system comprising:
- at least one mobile robot, referred to as "collecting robot" (10);
- a plurality of mobile robots, referred to as "producing robots" (20);
wherein each collecting robot (10) comprises:
- at least one input port (11) adapted for coupling with an output port of a producing robot;
- an output port (12) for outputting electrical energy received from each producing robot (20) coupled with the collecting robot (10);
wherein each producing robot (20) comprises:
- a photovoltaic, PV, generator (23);
- at least one input port (21) adapted for coupling with an output port (22) of another producing robot (20);
- at least one output port (22) for outputting electrical energy generated by the producing robot (20) and received from each other producing robot (20) coupled with the producing robot.

ABSTRACT

Common references, used by all countries

BIBLIOGRAPHIC DATA

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(52) Cooperative Patent Classification (CPC):
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(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

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- at least one output port (22) for outputting electrical energy generated by the producing robot (20) and received from each other producing robot (20) coupled with the producing robot.

Classification codes

All patent applications are classified in different technical areas

- International Patent Classification (IPC)

✓ The International Patent Classification (IPC), established by the Strasbourg Agreement 1971, provides for a system for the classification of patents according to the different areas of technology to which they belong.

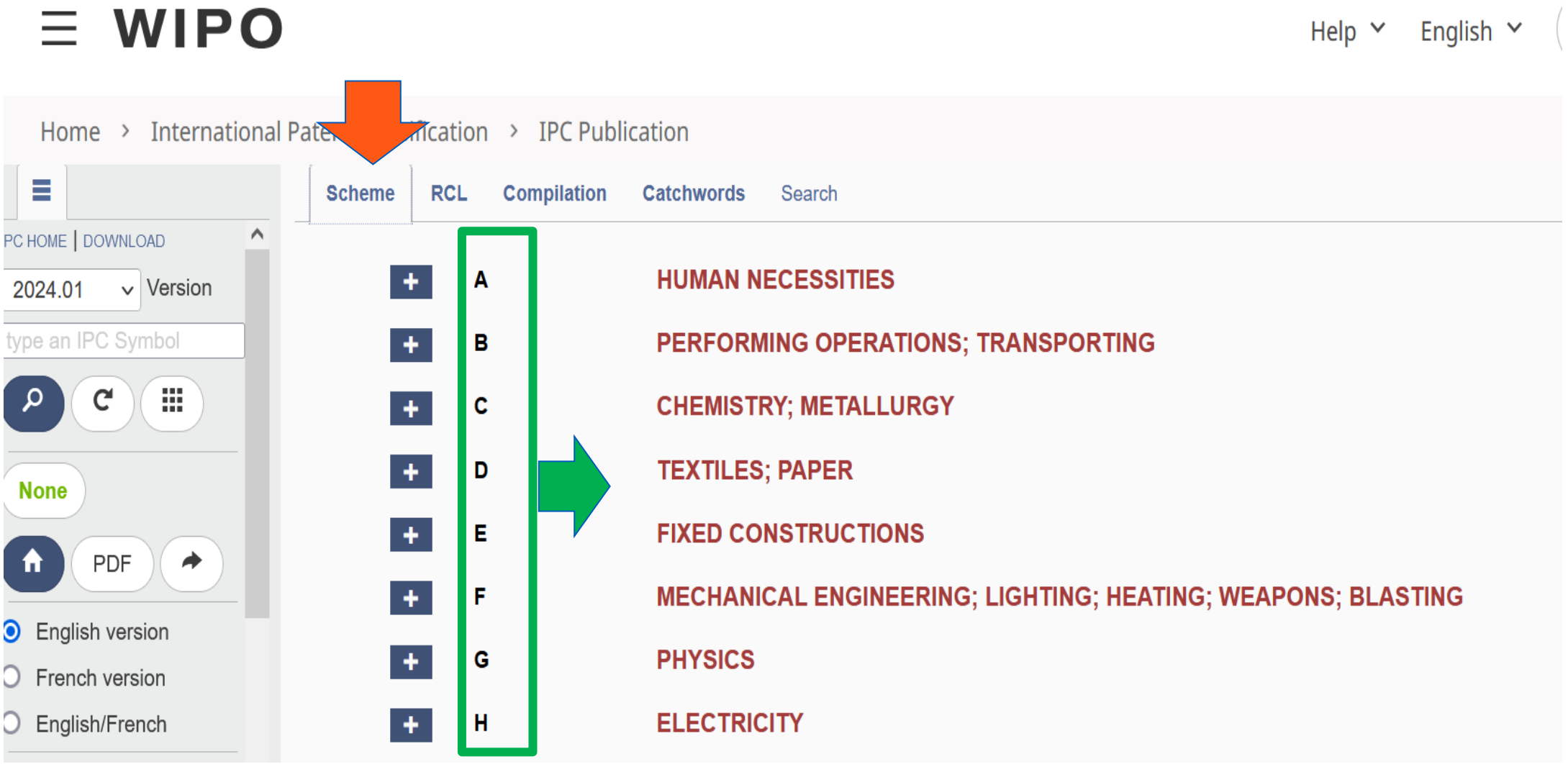
✓ This classification covers all technical/industrial domains

✓ Hierachical system

✓ Reliable : For each patent application, Patent offices attribute classification codes , which are checked again as the application process progresses (i.e. extensions)

- Different classifications per geographical area (**complementary** rather than opposed systems)
  - IPC : International Patent Classification
  - CPC : Cooperative Classification (EPO + USPTO)
  - FI : File Index (JPO – Japan Patent Office)

All patents are classified in different technical areas



✓ This classification covers all technical/industrial domains

All patents are classified in different technical areas

	+	H01	ELECTRIC ELEMENTS
	+	H02	GENERATION, CONVERSION, OR DISTRIBUTION OF ELECTRIC POWER
	+	H03	ELECTRONIC CIRCUITRY
	+	H04	ELECTRIC COMMUNICATION TECHNIQUE
	+	H05	ELECTRIC TECHNIQUES NOT OTHERWISE PROVIDED FOR
D	+	H10	SEMICONDUCTOR DEVICES; ELECTRIC SOLID-STATE DEVICES NOT OTHERWISE PROVIDED FOR [2023.01]
	+	H99	SUBJECT MATTER NOT OTHERWISE PROVIDED FOR IN THIS SECTION [2006.01]

D ⚠ − **H04W** **WIRELESS COMMUNICATION NETWORKS** (broadcast communication H04H; communication systems using wireless links for non-selective communication, e.g. wireless extensions H04M 1/72) **[2009.01]**

Note(s) **[2009.01]**

1. This subclass covers :

- communication networks for selectively establishing one or a plurality of wireless communication links between a desired number of users or between users and network equipment, for the purpose of transferring information via these wireless communication links;
- networks deploying an infrastructure for mobility management of wireless users connected thereto, e.g. cellular networks, WLAN [Wireless Local Area Network], wireless access networks, e.g. WLL [Wireless Local Loop] or self-organising wireless communication networks, e.g. ad hoc networks;
- planning or deployment specially adapted for the above-mentioned wireless networks;
- services or facilities specially adapted for the above-mentioned wireless networks;
- arrangements or techniques specially adapted for the operation of the above-mentioned wireless networks.

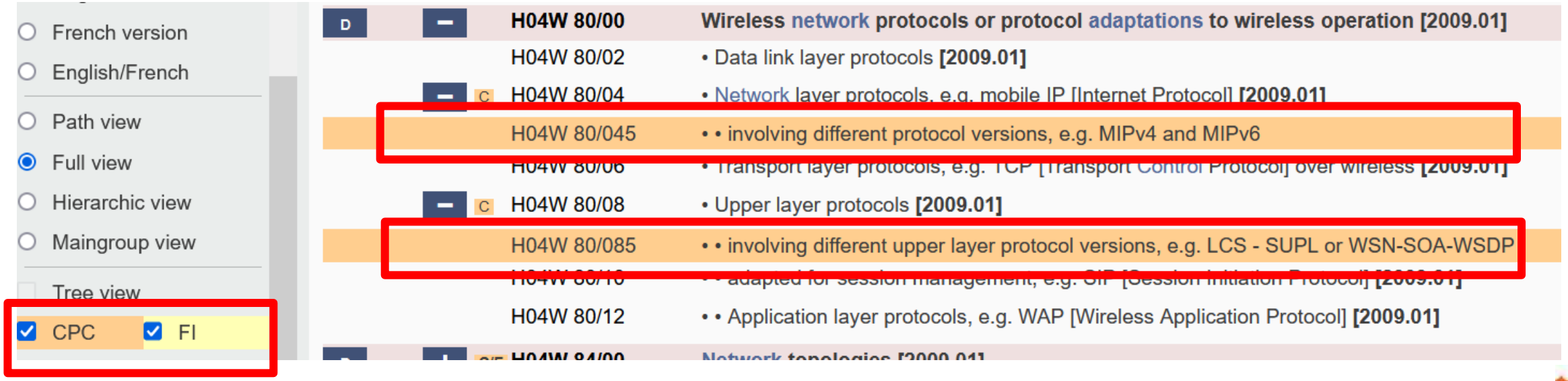
✓ Hierachical classification : sub classes provide more details

All patents are classified in different technical areas

H04W 80/00	**Wireless network protocols or protocol adaptations to wireless operation [2009.01]**
H04W 80/02	• Data link layer protocols **[2009.01]**
H04W 80/04	• Network layer protocols, e.g. mobile IP [Internet Protocol] **[2009.01]**
H04W 80/06	• Transport layer protocols, e.g. TCP [Transport Control Protocol] over wireless **[2009.01]**
H04W 80/08	• Upper layer protocols **[2009.01]**
H04W 80/10	• • adapted for session management, e.g. SIP [Session Initiation Protocol] **[2009.01]**
H04W 80/12	• • Application layer protocols, e.g. WAP [Wireless Application Protocol] **[2009.01]**

Communication protocols (OSI) applied to wireless communication

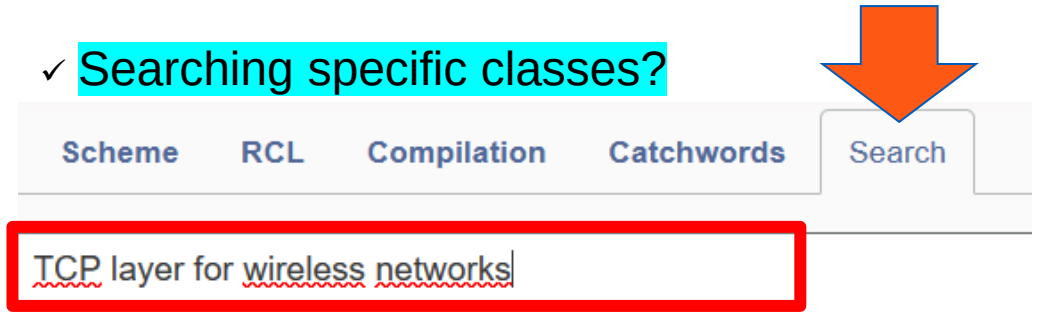
✓ Hierachical classification : sub classes provide more details



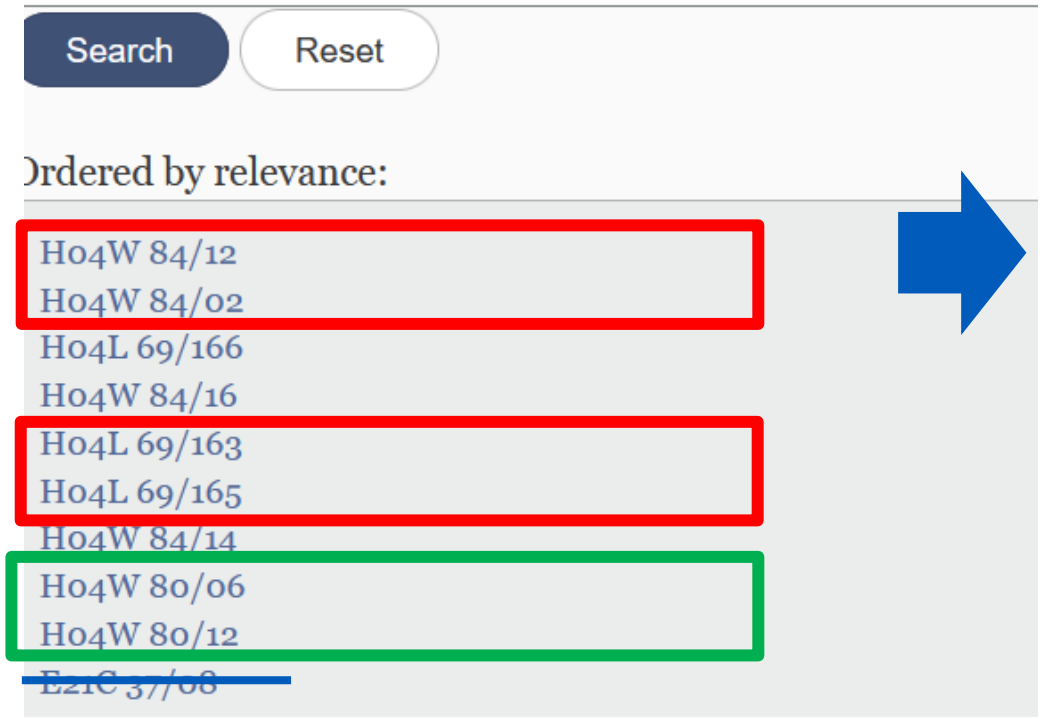
✓ **Complementary sub-classes**

All patents are classified in different technical areas

✓ Searching specific classes?



Use some relevant keywords



« Hierarchically pre-organised networks, e.g. paging networks, cellular networks,
WLAN [Wireless Local Area Network] or
WLL [Wireless Local Loop] »

Check relevant classes :
H04L 69; H04W 84 ; H04W 80

Patent Research
(Prior Art Search)

CHANGER L'ÉNERGIE ENSEMBLE

WHERE CAN I FIND PATENT INFORMATION ON THE INTERNET? 1/2

- **Patent Office databases: (national INPI - USPTO …) – regional EPO – WIPO ...**

Free access

- **They contain:**
  - Published full texts , figures…
  - Registers (state and chronology of the procedure)
  - The legal situation (abandoned, in force, withdrawn...)

- **Includes advanced search tools:**
  - keywords / inventors / applicants / dates / classification ...
  - cited documents

WHERE CAN I FIND PATENT INFORMATION ON THE INTERNET? 2/2

- **INPI (French Patent Office) database**

- Simple search: http://bases-brevets.inpi.fr/fr/accueil.html
- Advanced search: http://bases-brevets.inpi.fr/fr/recherche-avancee.html

- **EPO database (European Patent Office) / EspaceNet (over 150 million patent documents)**

- « Simple » Search https://worldwide.espacenet.com/advancedSearch?locale=en_EP
- Advanced Search: https://worldwide.espacenet.com/
- Operators http://worldwide.espacenet.com/help?locale=fr_EP&method=handleHelpTopic&topic=booleans

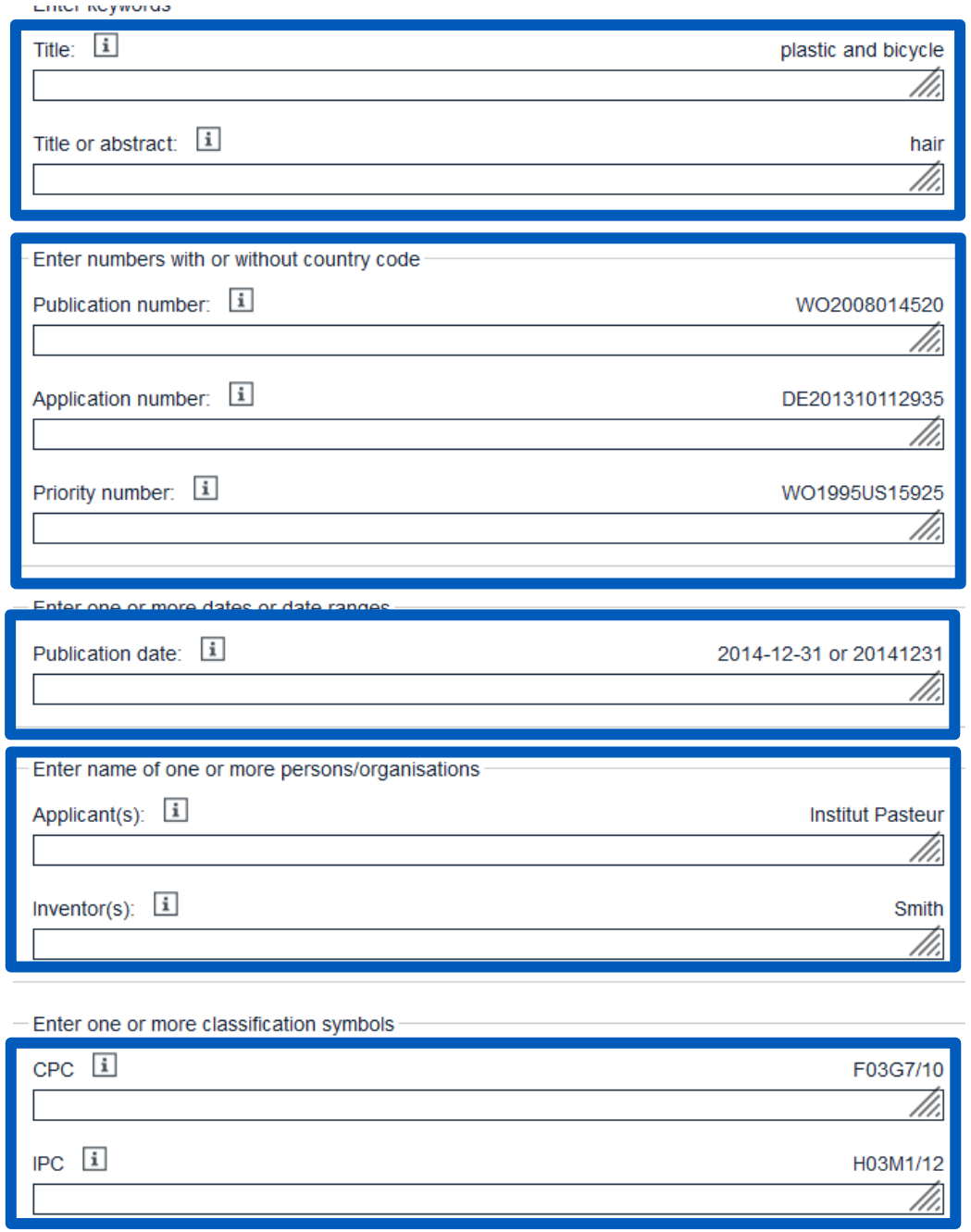
- **WIPO database / Patenscope (over 115 million patent documents)**

https://patentscope.wipo.int/search/en/search.jsf

➢ Databases are broadly similar but with some specific advantages…

WIPO Patentscope includes Non Patent Litterature, Stemming, Family Reduction, Quick search query…
EPO Espacenet : search in 3 languages (EN, DE, FR), Intuitive interface…

Espacenet : Simple Search



Text search : Title and/or Abstract **(not description!!)**
Implicit « AND », use « OR » if necessary, ( )

Publication related information (Number, Application, Priority)

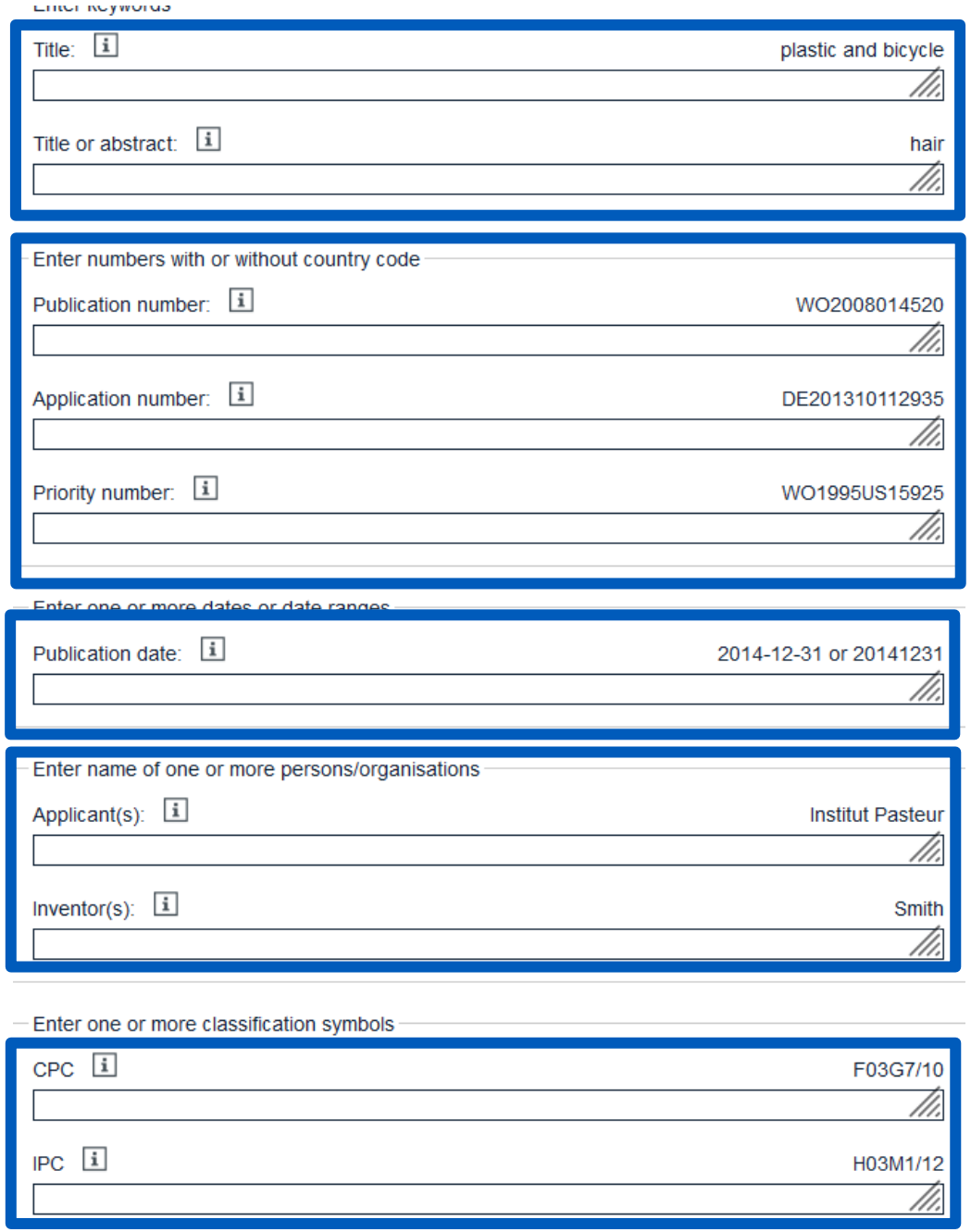
Date information (Publication date : 18months after filing/priority date)

Assignee information : Applicant (company) and/or inventor(s)

Classification codes

COMBINE THEM !

Espacenet : Simple Search



Text search : Title and/or Abstract **(not description!!)**

Implicit « AND », use « OR » if necessary, ( ) …

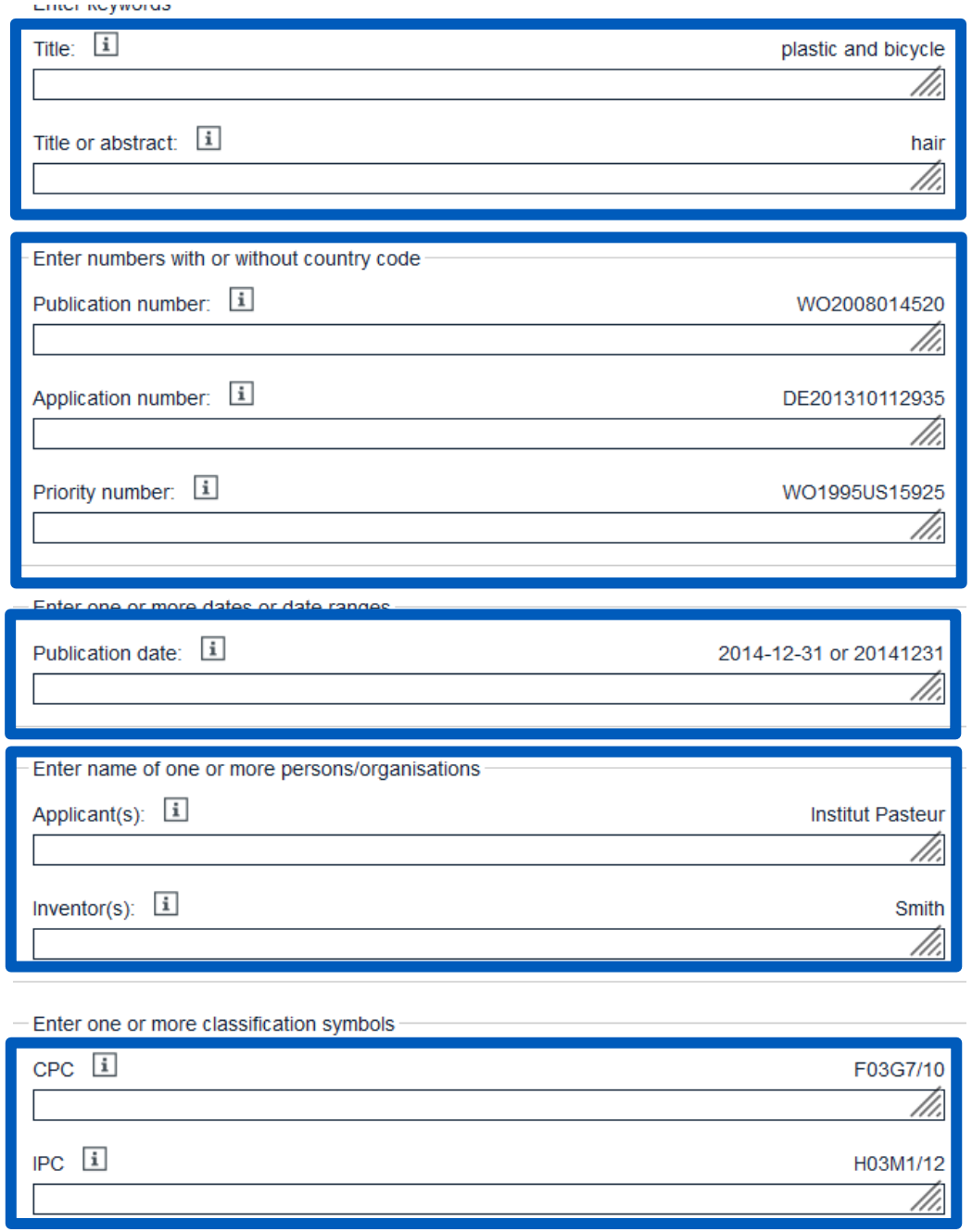
PRIOR ART SEARCH

COMBINE THEM !

Assignee information : Applicant (company) and/or inventor(s)

Classification codes

Espacenet : Simple Search



Publication related information (Number, Application, Priority) : **use country prefix codes (FR, DE…)**

Date information (**Publication date** : 18months after filing/priority date)

Assignee information : Applicant (company) and/or inventor(s)

COMBINE THEM !

STATISTICAL SEARCH…

All EDF first application in France published in 2023

Title: plastic and bicycle

Title or abstract: hair

Enter numbers with or without country code

Publication number: WO2008014520

Application number: DE201310112935

Priority number: WO1995US15925

Enter one or more dates or date ranges

Publication date: 2014-12-31 or 20141231

Enter name of one or more persons/organisations

Applicant(s): Institut Pasteur

Inventor(s): Smith

Enter one or more classification symbols

CPC F03G7/10

IPC H03M1/12

→ Application Number : FR
Priority Number: FR

→ 2023

→ Applicant : Electricite de France

COMBINE THEM !

All EDF first applications in France, extended in the USA, published in 2023

Enter keywords

Title: plastic and bicycle

Title or abstract: hair

Enter numbers with or without country code

Publication number: WO2008014520

Application number: DE201310112935

Priority number: WO1995US15925

Enter one or more dates or date ranges

Publication date: 2014-12-31 or 20141231

Enter name of one or more persons/organisations

Applicant(s): Institut Pasteur

Inventor(s): Smith

Enter one or more classification symbols

CPC F03G7/10

IPC H03M1/12

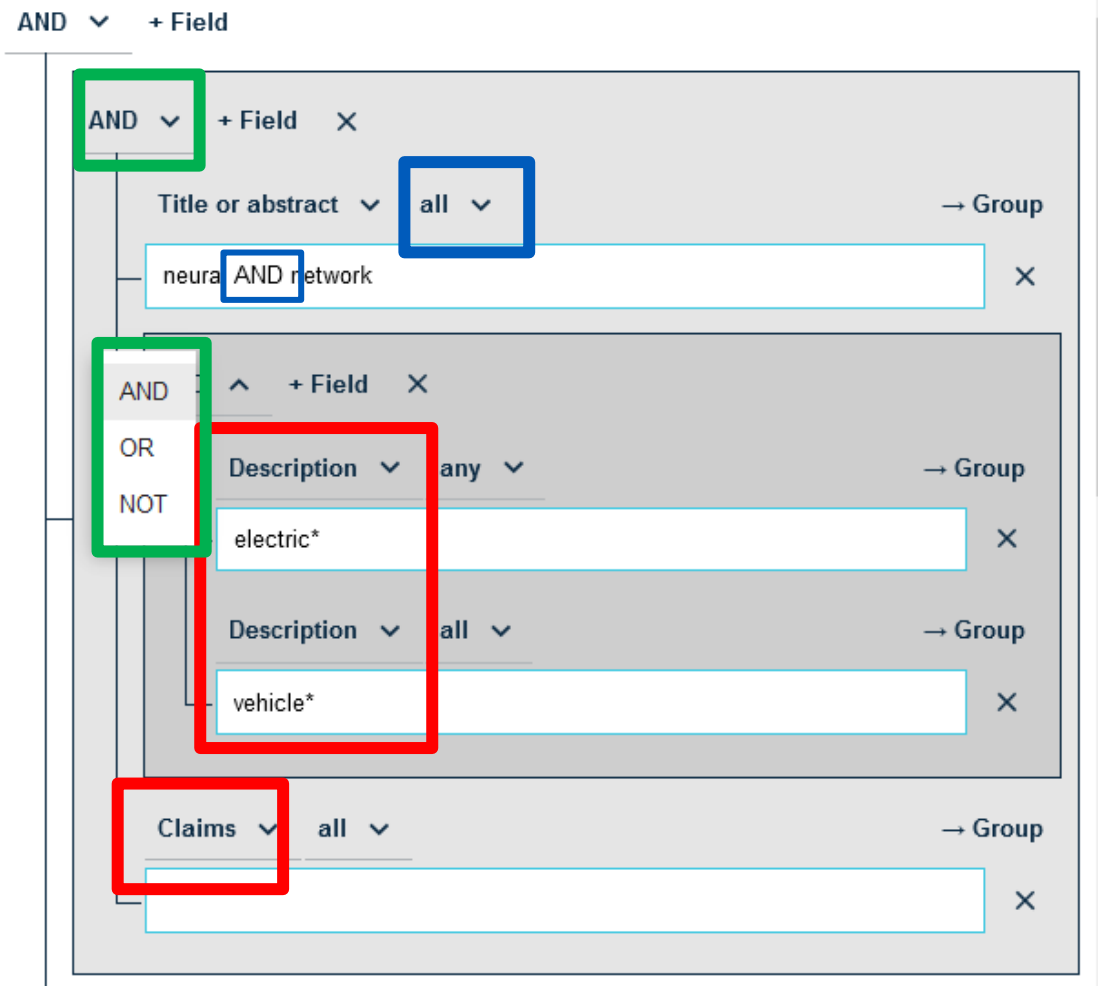
→ Application Number : US
Priority Number: FR

→ 2023

→ Applicant : Electricite de France

COMBINE THEM !

Search fields are the same
=> More possibilities : Search in all text field including in Description and Claims



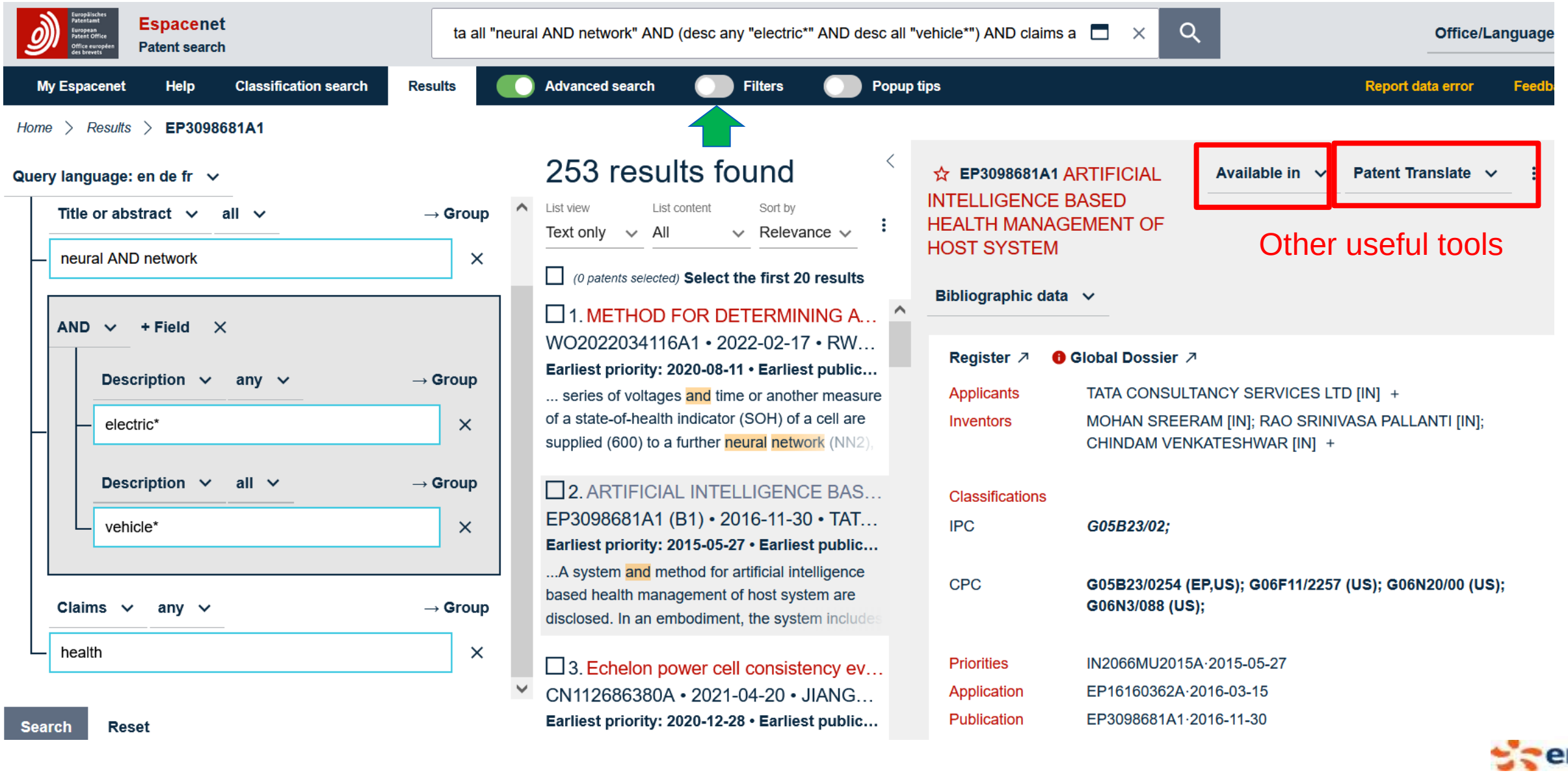
⇒ **More possibilities : Search in all text field including in Description and Claims**

⇒ **Refine/Change logical operators**

- **Wildcard operators (*, ?, …)**
- **Proximity search fields**

COMBINE THEM !

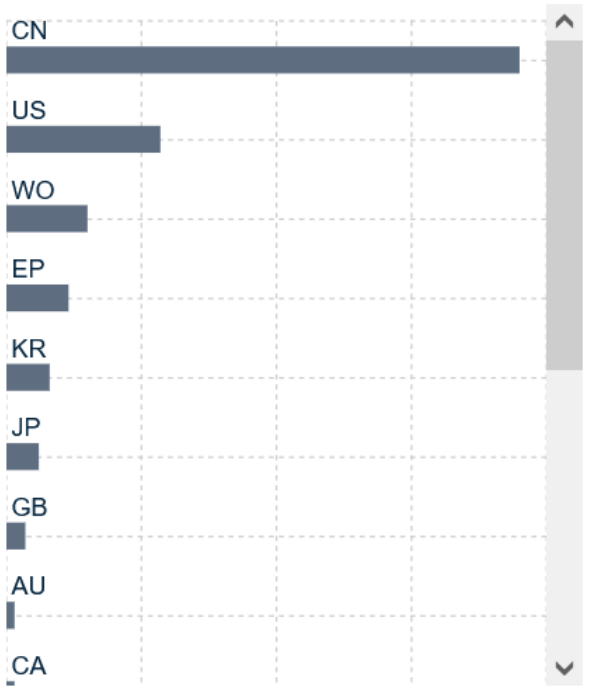
Espacenet : **Advanced Search**



Espacenet : **Advanced Search**

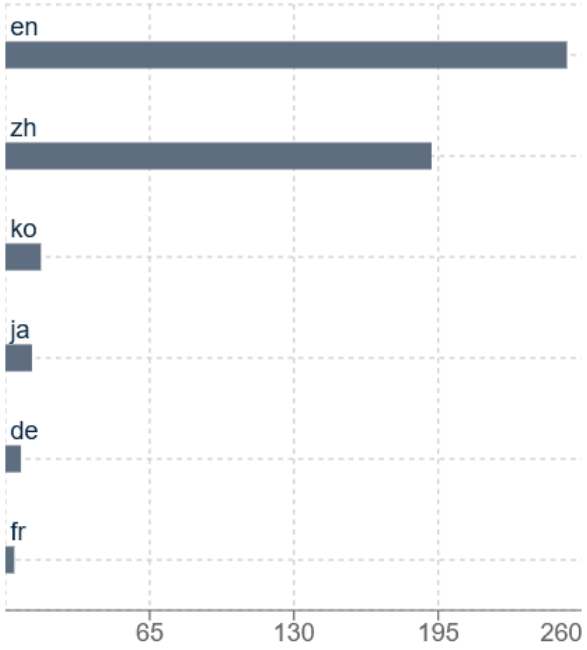
253 results found for: ta all "neural AND network" AND (desc any "electric*" AND desc all "vehicle*") AND claims any "health"

Countries (family)



Apply Exclude

Languages (family)

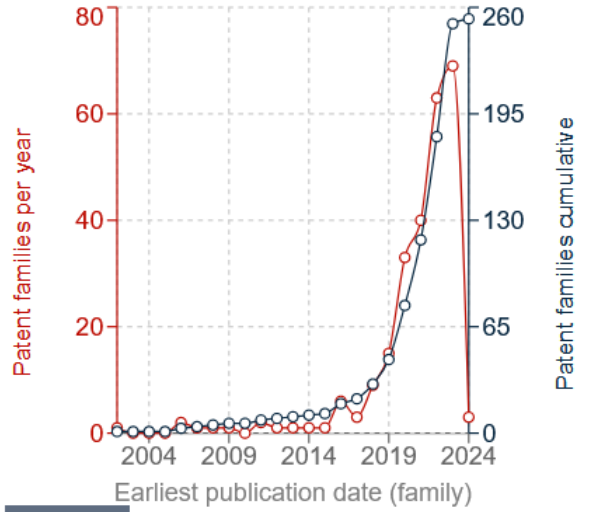


Apply Exclude

Earliest publication date (family)

From 2002-01-01 To 2024-12-31

2002 2024

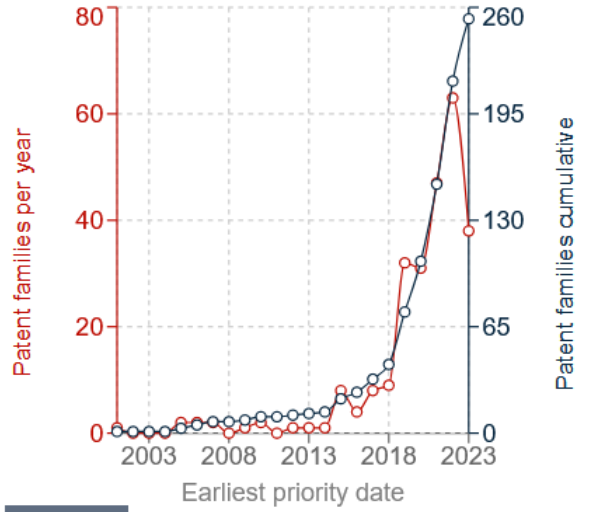


Apply

Earliest priority date

From 2001-01-01 To 2023-12-31

2001 2023



Apply

SOME STATISTICAL TOOLS BUT NOT PERFECT

=> USE PUBLIC DATABASES FOR ESPECIALLY PRIOR ART SEARCHES

Patent Research
(Freedom to operate)

CHANGER L'ÉNERGIE ENSEMBLE

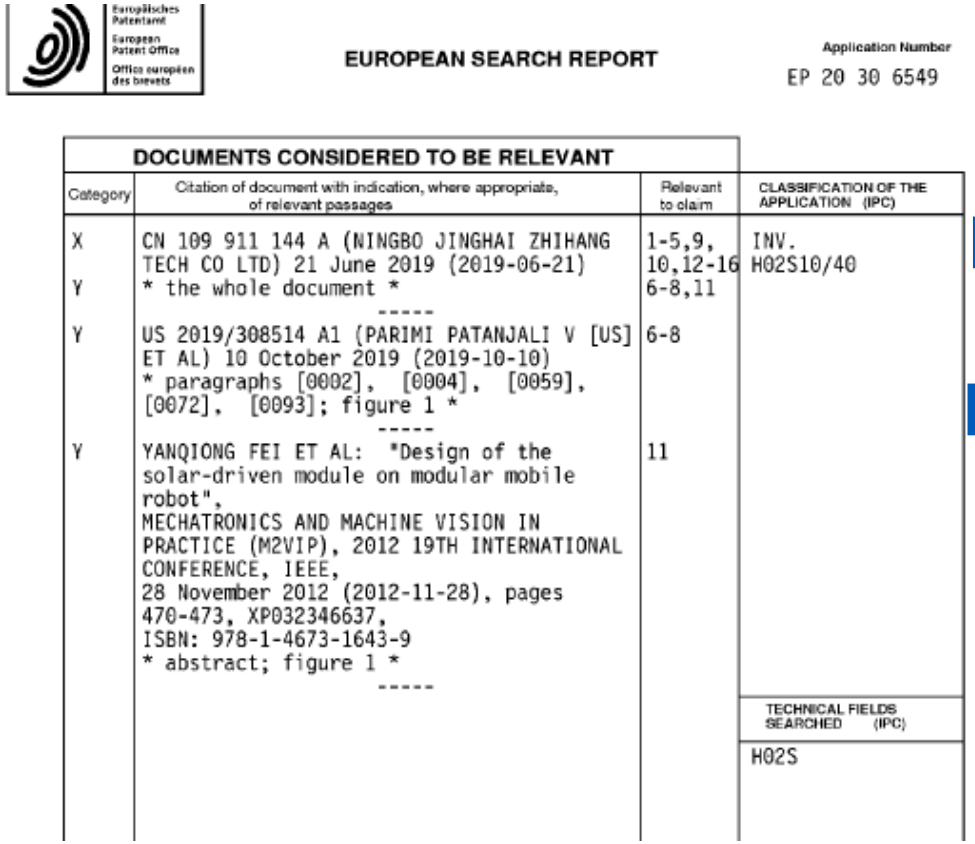
Freedom To Operate (FTO) search is not the same as Prior Art search !

Infringement = Operate in a country, an object covered by a patent (at least a claim) in force in that country, without agreement of the owner
The covered acts are: manufacturing, offering , placing on the market, using, importing, exporting, transshipment or holding (device/process)

- **Different goals :**
  - **What are the protected objects**
  - **Territorial inquiries**
  - **In force patent?**
  - **Who are the current patent owners**
  - **…**

Freedom to operate search is not the same as Prior Art search !

- **To start : Search report documents (closest prior art)**



Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 20 30 6549

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	CN 109 911 144 A (NINGBO JINGHAI ZHIHANG TECH CO LTD) 21 June 2019 (2019-06-21) * the whole document * -----	1-5,9, 10,12-16 6-8,11	INV. H02S10/40
Y	US 2019/308514 A1 (PARIMI PATANJALI V [US] ET AL) 10 October 2019 (2019-10-10) * paragraphs [0002], [0004], [0059], [0072], [0093]; figure 1 * -----	6-8	
Y	YANQIONG FEI ET AL: "Design of the solar-driven module on modular mobile robot", MECHATRONICS AND MACHINE VISION IN PRACTICE (M2VIP), 2012 19TH INTERNATIONAL CONFERENCE, IEEE, 28 November 2012 (2012-11-28), pages 470-473, XP032346637, ISBN: 978-1-4673-1643-9 * abstract; figure 1 * -----	11	
			TECHNICAL FIELDS SEARCHED (IPC)
			H02S

CN109911144

US2019308514

To start : Search report documents

CN109911144

✓ ONLY IN CHINA

To start : Search report documents

US2019308514

CN109911144 (A)
- Bibliographic data
- Description
- Claims
- Mosaics
- Original document
- Cited documents
- Citing documents
- **INPADOC legal status**
- INPADOC patent family

Quick help

- What happens if I click on "In my patents list"?
- What happens if I click on the "Register" button?
- What does "legal status" mean?
- Why is the legal status not always available?
- How might this information be useful to me?
- How reliable is this data?
- What is Global Dossier?

INPADOC legal status: CN109911144 (A) — 2019-06-21

In my patents list | Report data error

Modularized water rescuing robot

The EPO does not accept any responsibility for the accuracy of data and information originating from other authorities than the EPO; in particular, the EPO does not guarantee that they are complete, up-to-date or fit for specific purposes.

Legal status of CN109911144 (A) 2019-06-21:

CN	**F**	**201910226441 A** (Patent of invention)
	Event date :	2019/06/21
	Event code :	PB01
	Code Expl.:	PUBLICATION
	Event date :	2019/07/16
	Event code :	SE01
	Code Expl.:	ENTRY INTO FORCE OF REQUEST FOR SUBSTANTIVE EXAMINATION
	Event date :	2021/12/24
	Event code :	RJ01
	Code Expl.:	- REJECTION OF INVENTION PATENT APPLICATION AFTER PUBLICATION

✓ REJECTED
(PROVISIONAL PROTECTION SO FAR)

▪ To start : Search report documents

US2019308514

US2019308514 (A1)

- **Bibliographic data**
- Description
- Claims
- Mosaics
- Original document
- Cited documents
- Citing documents
- INPADOC legal status
- INPADOC patent family

Quick help

- What is meant by high quality text as facsimile?
- What does A1, A2, A3 and B stand for after a European publication number?
- What happens if I click on "In my patents list"?
- What happens if I click on the "Register" button?

Bibliographic data: US2019308514 (A1) — 2019-10-10

In my patents list | Report data error | Print

MULTI-DIRECTIONAL WIRELESS CHARGING OF VEHICLES AND ROBOTS

Page bookmark	US2019308514 (A1) - MULTI-DIRECTIONAL WIRELESS CHARGING OF VEHICLES AND ROBOTS
Inventor(s):	PARIMI PATANJALI V [US]; HOSSAIN M RAIHAN [US] +
Applicant(s):	THE RES FOUNDATION FOR SUNY [US]; UNIV NEW YORK STATE RES FOUND [US] +
Classification:	**- international:** ***B60L53/12; B64C39/02; H02J50/12; H02J50/40; H02J7/02***
	- cooperative: **B60L53/12 (US); B60L53/122 (EP, US); B60L53/30 (EP); B64C39/024 (US); B64F1/362 (EP); B64U50/38 (EP); H02J50/005 (EP, US); H02J50/12 (US); H02J50/40 (EP, US);** B60L2200/10 (EP, US); B64U50/19 (US); Y02T10/70 (EP); Y02T10/7072 (EP); Y02T50/80 (EP); Y02T90/12 (EP); Y02T90/14 (EP)
Application number	US 201916379751 20190409 — Global Dossier
Priority number(s):	US201862655099P 20180409 | US201916379751 20190409
Also published as:	US11332025 (B2)

✓ ONLY IN THE US

X GRANTED…

To start : Search report documents

US2019308514

- Claims
- Mosaics
- Original document
- Cited documents
- Citing documents
- INPADOC legal status
- INPADOC patent family

Quick help

- What is meant by high quality text as facsimile?
- What happens if I click on "In my patents list"?
- What happens if I click on the "Register" button?
- What happens if I click on the red "patent translate" button?
- How can I view the claim structure?
- Why are the claims sometimes in French or German or another language altogether?

Multi-directional wireless charging of vehicles and robots

Claims of US11332025 (B2)

Translate this text into

Select language

patenttranslate powered by EPO and Google

Original claims | **Claims tree**

1. What is claimed is: 1. A multi-directional wireless charging station, configured to deliver wireless power to remote controlled and autonomous unmanned vehicles and robots, comprising:
one or more charging pods, wherein each pod includes:
at least two panels, each panel having a first surface facing, at least in part, one or more of an opening and a surface of another panel, and a floor, the at least two panels connect to the floor along a bottom edge of the panels; and
at least two wireless power transmitters (WPTs) affixed to at least two of the panels, wherein the WPTs are configured to wirelessly deliver power to at least two wireless power receivers (WPRs) associated with one of a remote-controlled vehicle, an autonomous unmanned vehicle and a robot.

DEFINE YOUR GOALS WHEN STARTING PATENT RESEARCH

- **Prior art ?**
- **Freedom to operate?**
  - **Competitors/Partners…**
  - **Crowded technologies**
- **Searching for skills?**
  - **Inventors**
  - **Applicants**
- **Competitors/Partners**
  - **Technology strategies**
  - **Knowledge about patents**
  - **Current owners of patents**

SOME TIPS

➢ Prior art search

- ➢ Use synonyms, mandatory key words in the domain/invention
- ➢ Use Classifications
  - ▪ Do not use same key words as classes/sub-classes titles
- ➢ Proximity operators (« near », « adj », words in a sentence/paragraph…)
- ➢ Extend formulations
  - ❖ EX : car[,s] AND door = door of a car ; door NEAR3 car[s,] ….
- ➢ Figures
- ➢ **Start from a basic search result to find some documents and refine your key words**
  - ✓ **Final set about 15 documents**

➢ Competitors/Partners

- ➢ Subsidiaries
- ➢ Current owners/Assignees

Patent Research
(Non Free tools)

CHANGER L'ÉNERGIE ENSEMBLE

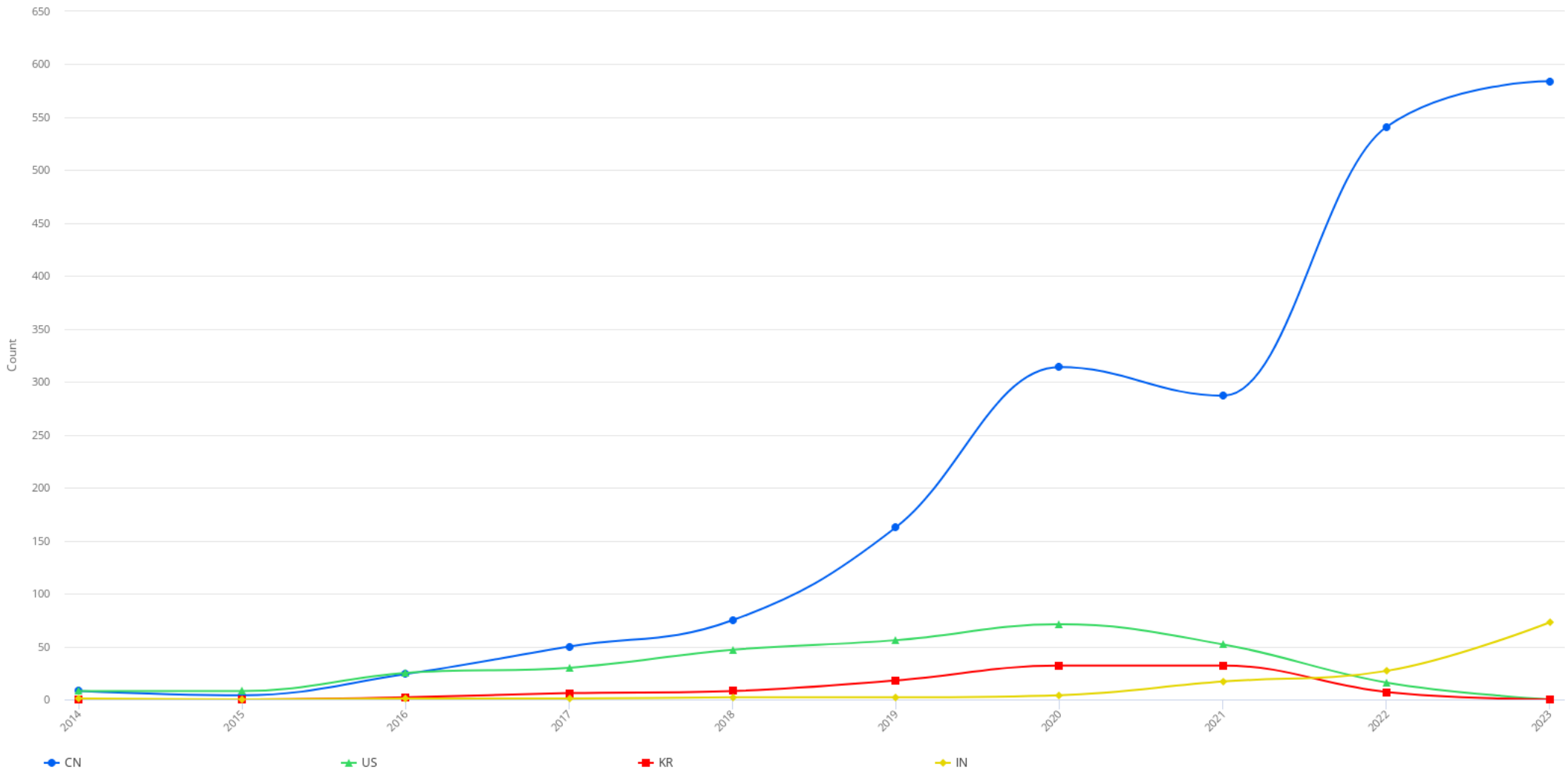
TOOLS THAT OFFER MORE INTUITIVE USER INTERFACE

There are (non free) tools that provide other useful functions for patent study : Thomson Innovation, Orbit (Questel), Innography (Clarivate) ….

➢ Gather and process data from patent databases

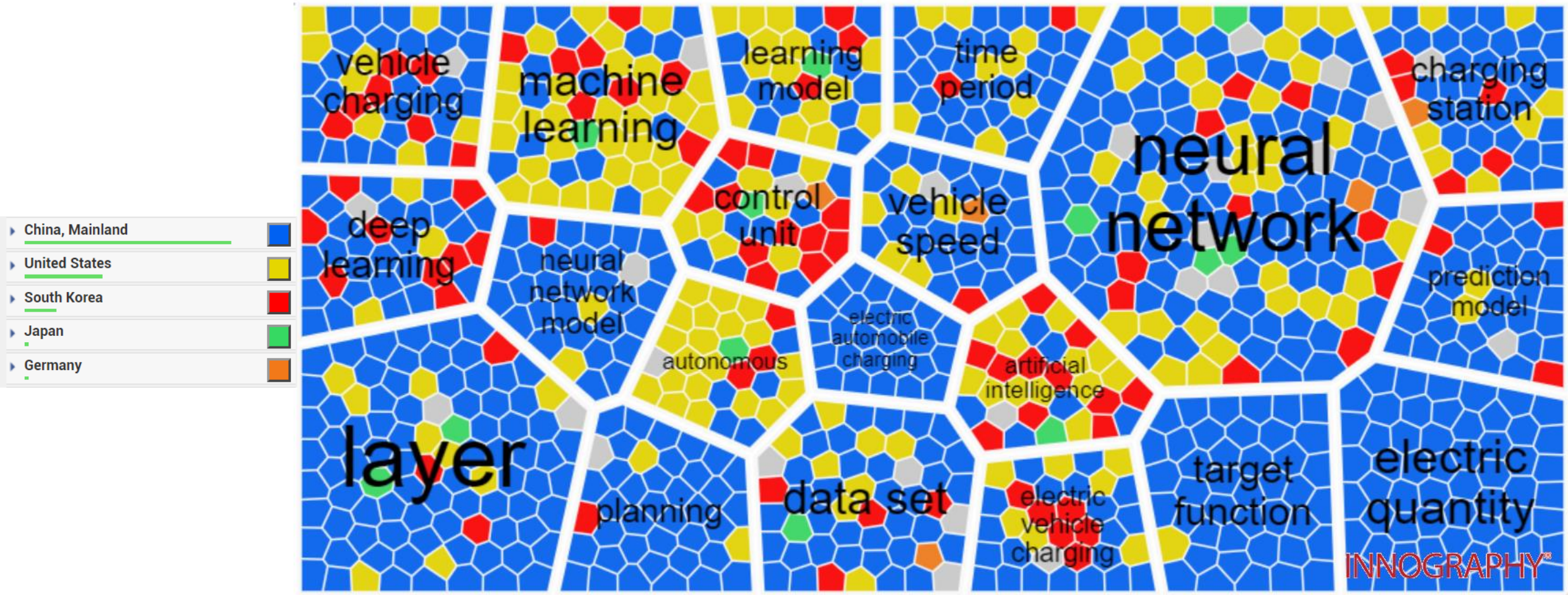
- Patent researches
  - Classic : first applications, grant patents, by dates, reduction by families…
  - In force/abandoned patents
  - Patentscape for market strategies…
- Resarch by companies (+ subsidiaries)
- …

TOOLS THAT OFFER MORE INTUITIVE USER INTERFACE



First applications per year for « electric vehicles using IA »

TOOLS THAT OFFER MORE INTUITIVE USER INTERFACE



Patentscape example for « electrical vehicle using IA » per Country
(grant and active patents)

TOOLS THAT OFFER MORE INTUITIVE USER INTERFACE

Summary | Stock

Website	www.edf.fr/
Ultimate Parent	N/A
Validation Source	Extracted from Bibliographic Data
Stock Symbol	EDF
Market Cap	$45,505,800,000
Annual Revenue	$95,652,321,631
Location	Paris, ILE DE FRANCE France
# Employees	165000

Logos provided by Clearbit *Last updated: 2023-08-01*

Project Info

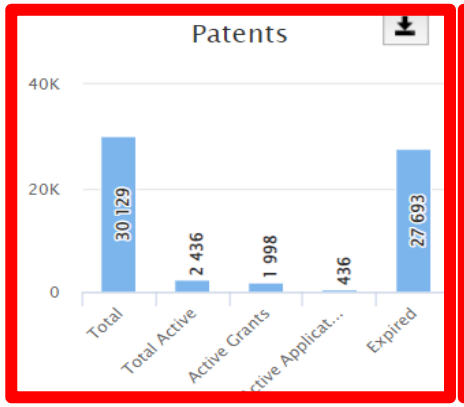
Projects	EDF Total
Users	Lanto Rakotoharison

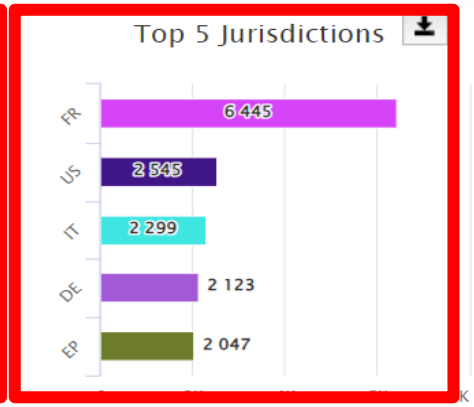
Subsidiaries

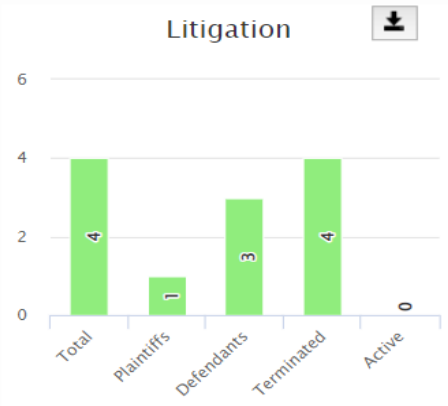
A-C | D-F | G-I | J-L | M-O | P-R | S-U | V-X | Y-Z | View All (143)

Report an Error

- Agefred SA
- Agefred Servicio Sa
- Ageval SA
- Ageval Servicio SA
- An Non Korekuteifu Jirukoteyuu
- Areva Np
- AREVA NP Canada Ltd.







Company search by name : Overview, example « *Electricite de France*»

Appendixes

CHANGER L'ÉNERGIE ENSEMBLE

COST OF A PATENT

➢ Annuities (in euros)

YEAR	European Procedure	France	Germany	United States Of America (from the grant)
1	0	0	0	0
2	0	38	0	0
3	490	38	70	0
4	610	38	70	1680
5	855	38	90	
6	1090	76	130	
7	1210	96	180	
8	1330	136	240	3158,4
9	1450	180	290	
10	1640	220	350	
11	1640	260	470	
12	1640	300	620	6468
13	1640	350	760	
14	1640	400	910	
15	1640	460	1060	
16	1640	520	1230	
17	1640	580	1410	
18	1640	650	1590	
19	1640	730	1760	
20	1640	800	1940	

➢ Procedure Fees:

- ➢ **Application fees (request for a patent, search report…)**
- ➢ **Office Actions (each time an office requires a response)**
- ➢ **Grant (pre grant decision, Grant, printing fees)**

COST OF A PATENT

➢ First application + Extension costs (including IP firm cost)

Country	Cost in Euros
France (priority filing)	**6750**
PCT	**9100**
Europe : *3 (UK/DE/FR) + 2 countries non EN/FR/DE speaking*	**16480**
USA	**17300**
Canada	**7700**
China	**14300**

https://www.ipside.com/fr/guide-pi/cout-procedure-brevet-france-pct-international

Assumption : priority application in France, 1 office action only per patent office

PATENT ENGINEERS

➢ Patent Examiner

- **Requirements: scientific background, expert in a given technical field**
  - **Examine patent applications until grant or post grant (opposition procedure…)**
  - **Prior art searches**
  - **Update case laws**

➢ Patent Engineer

❖ IP Law firms :

- ➢ **Requirements: scientific background, national patent Attorney/ European patent attorney certification**
  - **Patent drafting, Support patent granting, prior art searches, freedom to operate studies, Attacking or Defending a patent … for a client**

➢ In a company

- ➢ **Requirements: scientific background, national patent Attorney/ European patent attorney certification**
  - **Patent drafting, Support patent granting, prior art searches, freedom to operate studies, Attacking or Defending a patent … for the company**

PATENT ENGINEERS

- **Degree**
  - **National/European patent attorney => Representing an applicant before a patent office**

  - **National : generaly requires taking special examinations ‘Qualifying Examination’**
    - **In France: requires a degree at Strasbourg University (CEIPI - Center of Intellectual Property Studies) and and at least 3 years' professional experience in patents**

  - **European Patent Attorney : taking European ‘Qualifying Examination’**
    - **Support training at Strasbourg University (CEIPI - Center of Intellectual Property Studies)**

THANK YOU!

QUESTIONS?

CHANGER L'ÉNERGIE ENSEMBLE

BIBLIOGRAPHY/LINKS

- https://worldwide.espacenet.com/advancedSearch?locale=en_EP
- https://worldwide.espacenet.com/

- **https://ipcpub.wipo.int/?notion=scheme&version=20240101&symbol=none&menulang=en&lang=fr&viewmode=f&fipcpc=no&showdeleted=yes&indexes=no&headings=yes&notes=yes&direction=o2n&initial=A&cwid=none&tree=no&searchmode=smart**

- **https://www.ipside.com/fr/guide-pi/cout-procedure-brevet-france-pct-international**