PRIOR ART SEARCHES

Patent databases and strategies

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AGENDA

- Introduction
- Prior art searches
- Patent databases
- Classification codes
- Example
- Conclusions

WHY PRIOR ART SEARCHES ARE IMPORTANT!

- To avoid «reinventing the wheel» (waste of R&D resources)
- To avoid infringement of other companies' patents
- To write a better patent application
- To speed up the prosecution of a patent
- To find out the most recent inventions
- To study the development of a particular technology

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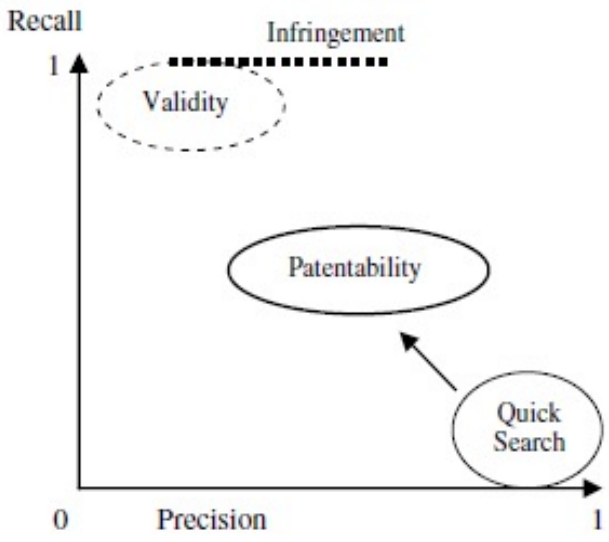
TYPES OF PRIOR ART SEARCHES

- ***Informative* (or "quick" or state of the art)**: informative search for R&D planning, technological trends analysis, competitors' monitoring (IPC + KW)
- ***Patentability search (novelty)***: the purpose is to determine whether an invention is novel and potentially patentable
- ***Validity search***: it can be seen as *a posteriori* patentability search (the purpose is to determine if a granted patent is indeed valid)
- ***Legal status***
- ***Freedom To Operate (FTO)***



LEGAL STATUS (1)

Home Ricerca Servizi documentali Servizi statistici Utilità

102017000001505	09/01/2017	Concessa	REATTORE CATALITICO A CONCENTRAZIONE SOLARE.	**MANENTI Flavio** PIROLA Carlo BIANCHI Claudia
102016000123786	06/12/2016	Concessa	INNOVATIVO IMPIANTO DI BIORAFFINERIA ENERGETICAMENTE AUTOSOSTENIBILE PER LA CONVERSIONE DI BIOMASSE DI SECONDA GENERAZIONE	BARGIACCHI Enrica Marmiroli Nelson Miele Sergio **Manenti Flavio**
102013902181423	02/08/2013	Titolata	PROCESSO DI RIDUZIONE DI CO2 PER PRODUZIONE DI GAS DI SINTESI.	MOLINARI LUCIO PIERUCCI SAURO **MANENTI FLAVIO**

Record totali 14

1 a 10 di 14 << >> vai a pag. pag. 1 di 2

Inventori 4

Titolari 4

Mandatari 1

Domicilio elettivo 1

Studio 1

Annotazioni 1

Istanze 2

Pagamenti 2

Data	Importo €	Tipo	Identificativo	Causale
06/12/2016	50,00	Modello F24	Deposito Pagamento Deposito, Annualita, Altri Tributi	
06/11/2020	60,00	Modello F24	Deposito Pagamento Deposito, Annualita, Altri Tributi	Brevetto per invenzione industriale - ANNUALITA 5° ANNO

https://www.uibm.gov.it/bancadati/Advanced_search/type_url?type=pt&cl=1

LEGAL STATUS (2)

→ What are extension states?

Maintenance news +

News flashes +

Related links +

↗ ES	Patent validated	EP14777817	ES2754283	Politecnico di Milano	---	---	28.09.2021 Latest annual fee paid: 8	---
↗ FI	Patent not validated	EP14777817	EP3027552	Politecnico di Milano	---	---	---	22.11.2021
↗ FR	Patent in force	EP14777817	EP3027552	Politecnico di Milano	---	---	29.07.2021 Latest annual fee paid: 8	19.11.2021
↗ GB	Patent in force	EP14777817	EP3027552	Politecnico di Milano	---	---	22.07.2021 Latest annual fee paid : 8	---
↗ GR	*No data provided by the national patent office for this patent*							
↗ HR	*No data provided by the national patent office for this patent*							
↗ IE	Patent lapsed	EP14777817	EP3027552	Politecnico di Milano	23.04.2021	23.04.2021	---	23.04.2021
↗ LT	Patent not validated	EP14777817	EP3027552	Politecnico di Milano	---	---	---	30.04.2021
↗ LU	Patent lapsed	EP14777817	EP3027552	Politecnico di Milano	---	31.07.2020	---	28.09.2021
↗ MC	Patent lapsed	14777817.9	3027552	Politecnico di Milano	31.07.2020	---	---	03.02.2021
↗ MK	*No data provided by the national patent office for this patent*							
↗ MT	*No data provided by the national patent office for this patent*							
↗ NO	*No data provided by the national patent office for this patent*							
↗ NL	Patent validated	EP14777817	EP3027552	Politecnico di Milano	---	---	21.07.2021	19.11.2021
↗ PL	Patent not validated	EP14777817	EP3027552	Politecnico di Milano	---	---	---	03.09.2021
↗ PT	Patent not validated	EP147778179	EP3027552	POLITECNICO DI MILANO	---	---	---	09.05.2016
↗ RO	*No data provided by the national patent office for this patent*							
↗ RS	Patent not validated	---	---	---	---	---	---	21.11.2021

Pagamenti 3

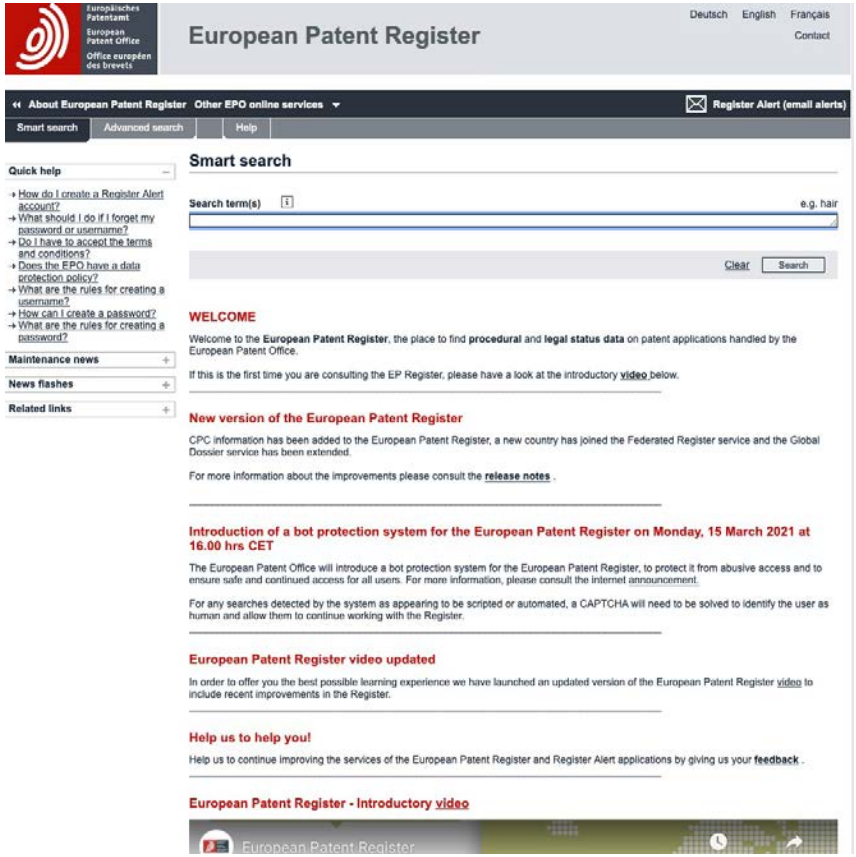
Data	Importo €	Tipo	Identificativo	Causale
23/08/2017	60,00	Modello F24	Deposito Pagamento Deposito, Annualita, Altri Tributi	Brevetto per in industriale - AN AN
10/08/2018	90,00	Modello F24	Deposito Pagamento Deposito, Annualita, Altri Tributi	Bre ind AN
20/08/2019	120,00	Modello F24	Deposito Pagamento Deposito, Annualita, Altri Tributi	Bre ind AN

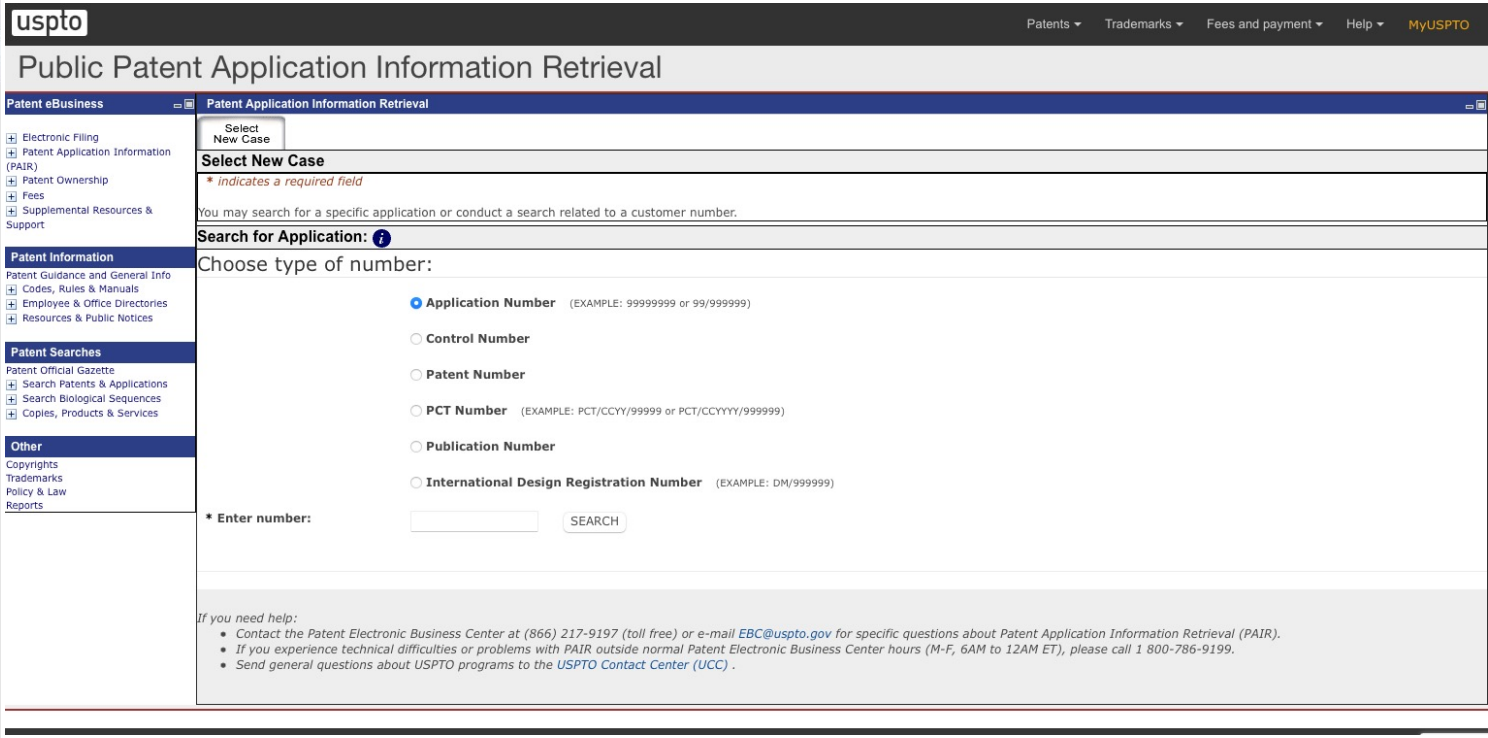
Pagamenti 2

Data	Importo €	Tipo	Identificativo	Causale
24/07/2020	120,00	Modello F24	Annualità convalida Brevetti Europei	Brevetto Europeo - ANNUALITA 7° ANNO
20/07/2021	170,00	Modello F24	Annualità convalida Brevetti Europei	Brevetto Europeo - ANNUALITA 8° ANNO

https://register.epo.org/application?number=EP14777817&lng=en&tab=federated

LEGAL STATUS (3)





https://register.epo.org/regviewer

https://portal.uspto.gov/pair/PublicPair

PATENT FAMILIES

My Espacenet | Help | Classification search | Results | Advanced search | Filters | Popup tips | Report data error | Feedback

Home > Results > EP3027552B1

1. >

EP3027552B1 SYNGAS PRODUCTION BY CO2 REDUCTION PROCESS

Available in

Bibliographic data | Description | Claims | Drawings | Original document | Citations | Legal events | Patent family

Simple family | INPADOC family | Latest legal events

CCD↗

Publication	Application number	Title	Publication date	Applicants
CN105531222B	CN201480043519A	Syngas production by CO2 reduction process	2018-11-06	
DK3027552T3	DK14777817T	FREMGANGSMÅDE TIL FREMSTILLING AF SYNGAS VED CO2-REDUKTION	2019-11-25	MILANO POLITECNICO [IT]
EA031340B1	EA201600161A	PROCESS FOR PRODUCING SYNGAS BY COREDUCTION PROCESS	2018-12-28	MILANO POLITECNICO [IT]
EA201600161A1	EA201600161A	PROCESS FOR PRODUCING SYNGAS BY COREDUCTION PROCESS	2016-06-30	
EP3027552A1	EP14777817A	SYNGAS PRODUCTION BY CO2 REDUCTION PROCESS	2016-06-08	MILANO POLITECNICO [IT]
EP3027552B1	EP14777817A	SYNGAS PRODUCTION BY CO2 REDUCTION PROCESS	2019-08-28	MILANO POLITECNICO [IT]
ES2754263T3	ES14777817T	Producción de sintegas mediante un proceso de reducción de CO2	2020-04-16	MILANO POLITECNICO
ITMI20131322A1	ITMI20131322A	PROCESSO DI RIDUZIONE DI CO2 PER PRODUZIONE DI GAS DI SINTESI.	2015-02-03	MILANO POLITECNICO
US2016185596A1	US201414907573A	SYNGAS PRODUCTION BY CO2 REDUCTION PROCESS	2016-06-30	MILANO POLITECNICO [IT]
US9630839B2	US201414907573A	Syngas production by CO2 reduction process	2017-04-25	MILANO POLITECNICO [IT]
WO2015015457A1	IB2014063593W	SYNGAS PRODUCTION BY CO2 REDUCTION PROCESS	2015-02-05	MILANO POLITECNICO [IT]

PATENT SEARCHING: HOW TO DO IT?

- Scope of patent searches: to find out documents that claim similar technical features and not a mere match of words.
- A patent search may be carried out:
  - by keywords (intuitive but subjective)
  - by classification codes
  - by citations

Language-independent search tools

LIMITATIONS

- Not every part of some very old documents is indexed, so such documents may be hard to find using KWs
- Some documents do not have translated titles or abstracts. This applies to documents published before 1970 and to very recent submissions for which translations are not yet available
- If documents are published in languages that use non-Latin alphabets, names are not searchable, and neither are the title and the abstracts if they have not been translated into English
- Not all documents have a CPC symbol, or it has not been assigned yet

HOW TO DO A SEARCH (1)

- Analysis of the information received about the invention (**identify the essential features**)
- Identification of the most suitable databases for finding the prior art
- Planning of a search strategy (how to select and combine KWs and classes)
- Evaluation of the retrieved documents

HOW TO DO A SEARCH (2)

Some useful tips:

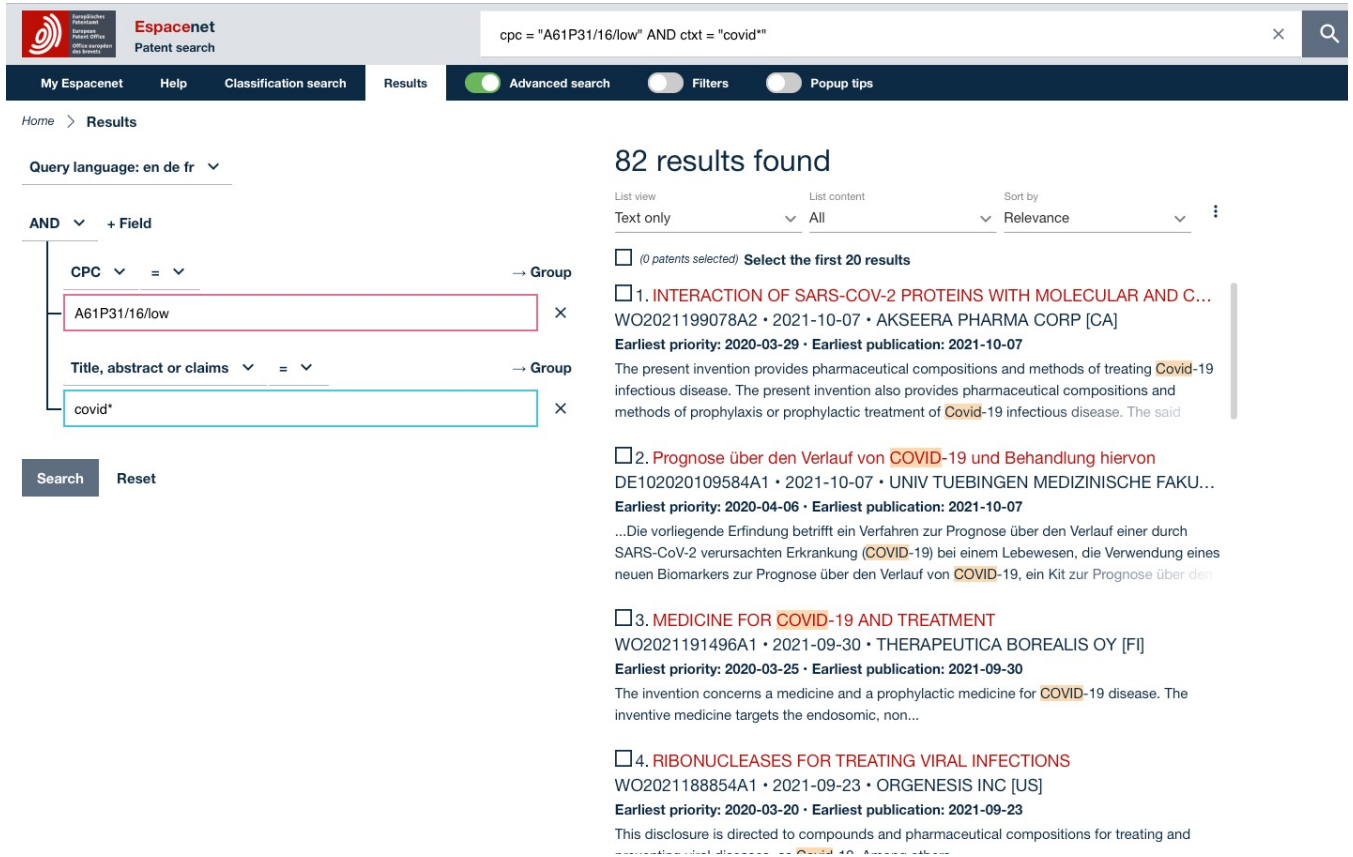
- Search in the title + abstract + claims (rather than in the full text), using precise KWs and classes [start small, expand carefully]
- Don't use proximity operators when searching title and abstract
- **Avoid long search queries**, don't combine all aspects in one query
- Aim for small result sets (50 records) and then **expand the search later**
- If you find a very relevant document, do **forward and backward citation** searches immediately (make use of the expertise of patent examiners!)
- For a novelty search, look at the most recent filings

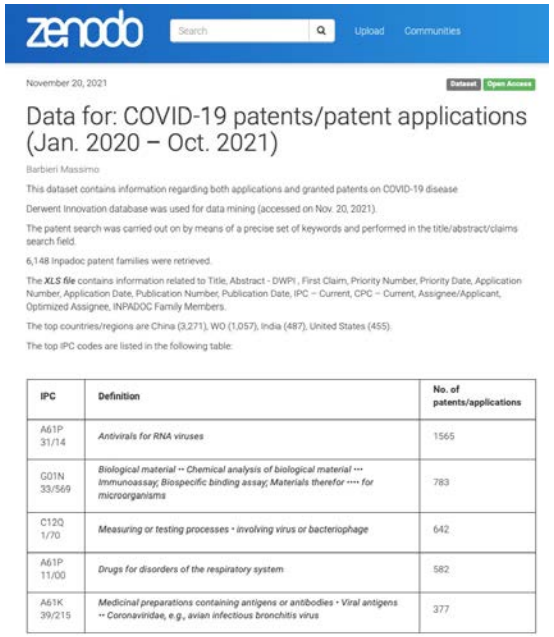
HOW TO DO A SEARCH (3)

- KWs can be **imprecise** (bridge: a construction, the support, tuning and tensioning part of musical instruments, a dental insert or an element in an electric circuit)
- **Country of origin** (e.g., in the field of fossil fuels: *boiler vs furnace*) and spelling (*analyse vs analyze*)
- **Synonyms** (CH_3COOH, acetic acid, ethanoic acid)
- The language of patents (the language used is a compromise between legal and technical jargon: «many» or «several» => »a plurality»; «screw => «fastening means»

HOW TO DO A SEARCH (4)

1. COVID19
2. COVID-19
3. COVID*
4. SARS-COV-2
5. **IPC/CPC**

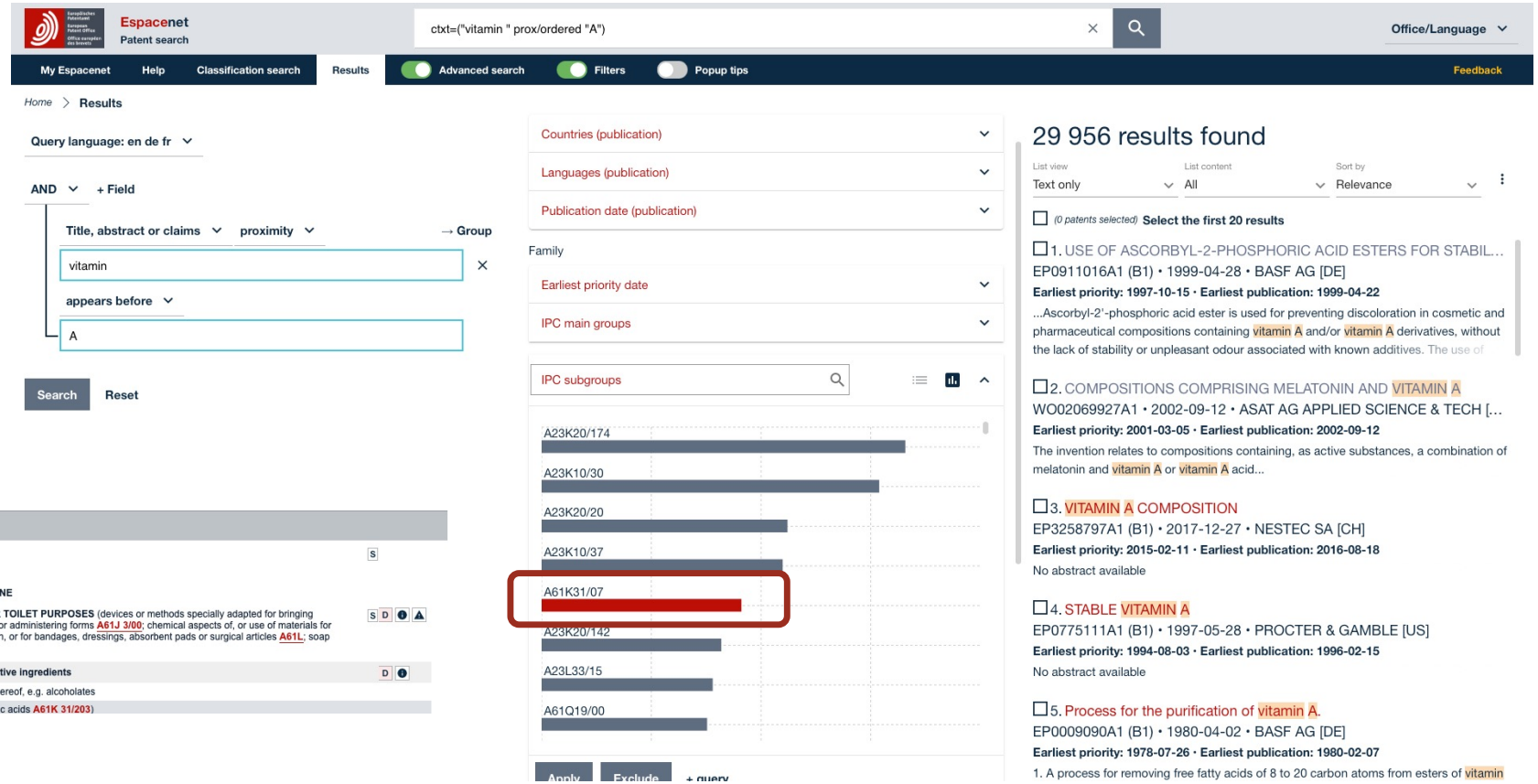




IPC	Definition	No. of patents/applications
A61P 31/14	*Antivirals for RNA viruses*	1565
G01N 33/569	*Biological material •• Chemical analysis of biological material ••• Immunoassay; Biospecific binding assay; Materials therefor •••• for microorganisms*	783
C12Q 1/70	*Measuring or testing processes • involving virus or bacteriophage*	642
A61P 11/00	*Drugs for disorders of the respiratory system*	582
A61K 39/215	*Medicinal preparations containing antigens or antibodies • Viral antigens •• Coronavirdae, e.g., avian infectious bronchitis virus*	377

https://worldwide.espacenet.com/patent/

HOW TO DO A SEARCH (5)

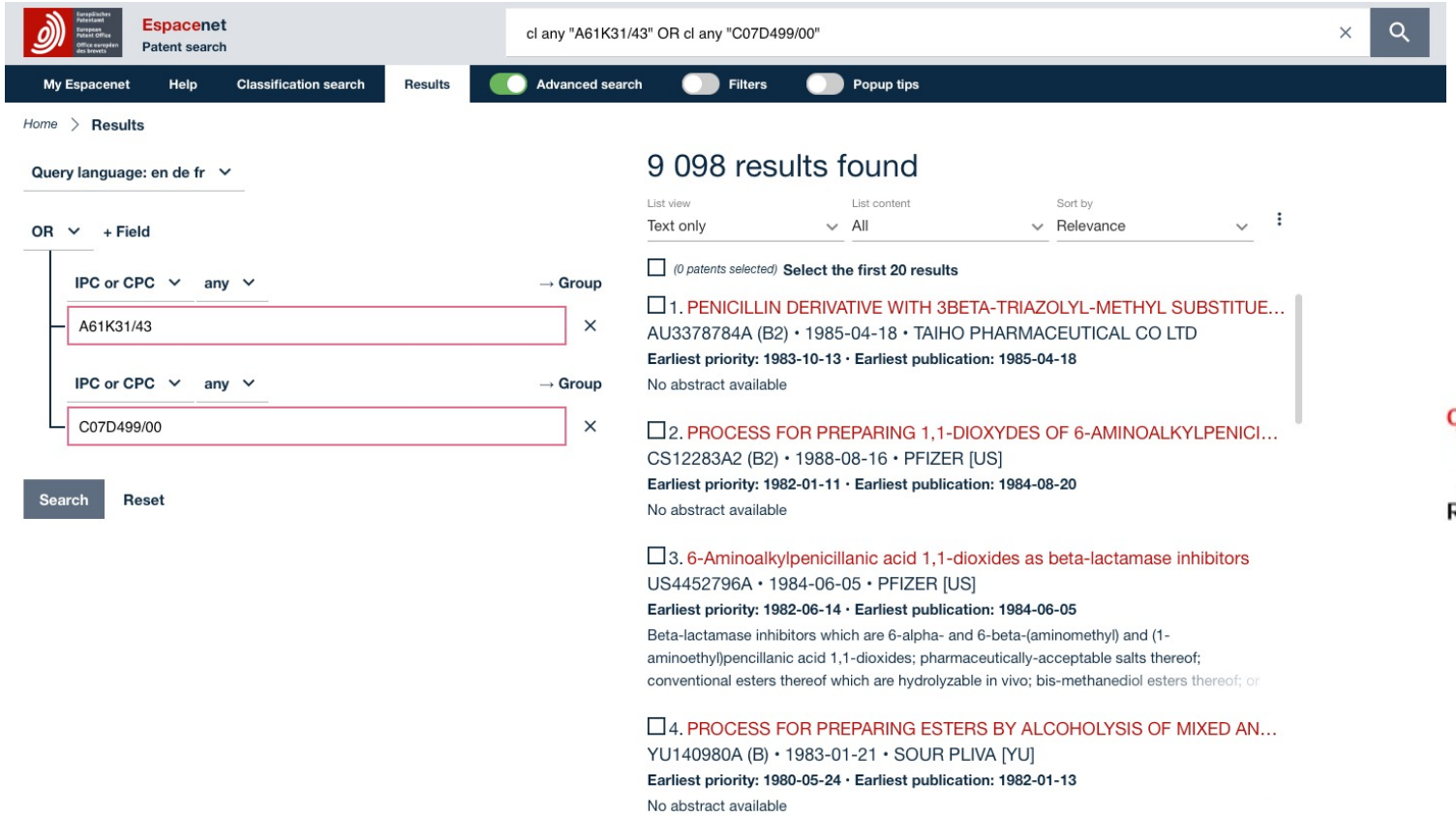


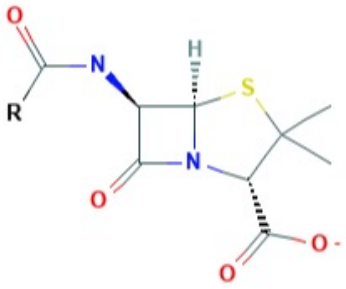
Classification symbol	Title and description
A	HUMAN NECESSITIES
	HEALTH; AMUSEMENT
A61	MEDICAL OR VETERINARY SCIENCE; HYGIENE
A61K	PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES (devices or methods specially adapted for bringing pharmaceutical products into particular physical or administering forms A61J 3/00; chemical aspects of, or use of materials for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles A61L; soap compositions C11D)
A61K 31/00	Medicinal preparations containing organic active ingredients
A61K 31/045	• Hydroxy compounds, e.g. alcohols; Salts thereof, e.g. alcoholates
A61K 31/07	• • Retinol compounds, e.g. vitamin A (retinoic acids A61K 31/203)

https://worldwide.espacenet.com/patent/

HOW TO DO A SEARCH (6)

1. IPC vs CPC
2. **Use/product**
3. KW (penicillin)





https://worldwide.espacenet.com/patent/

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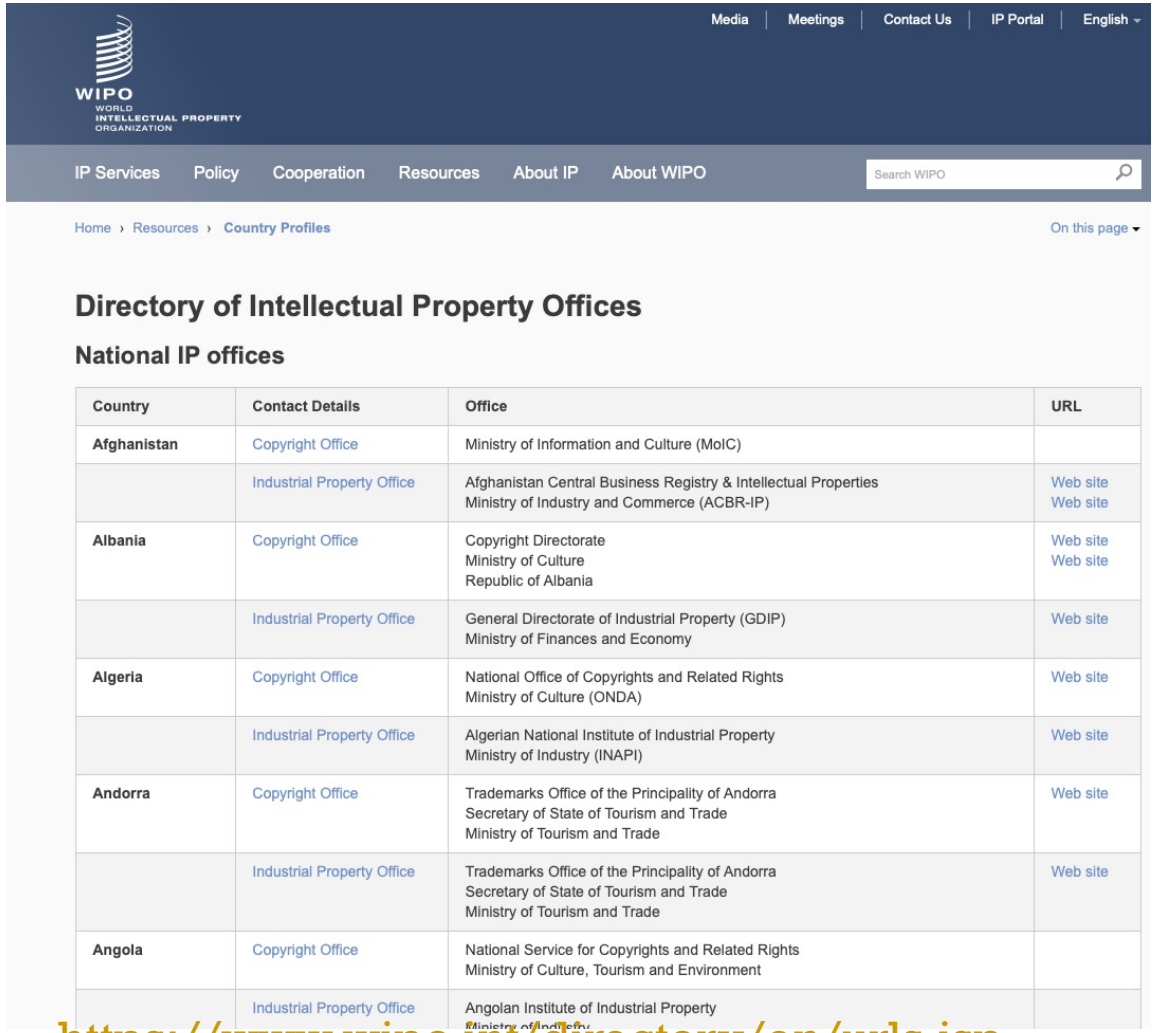
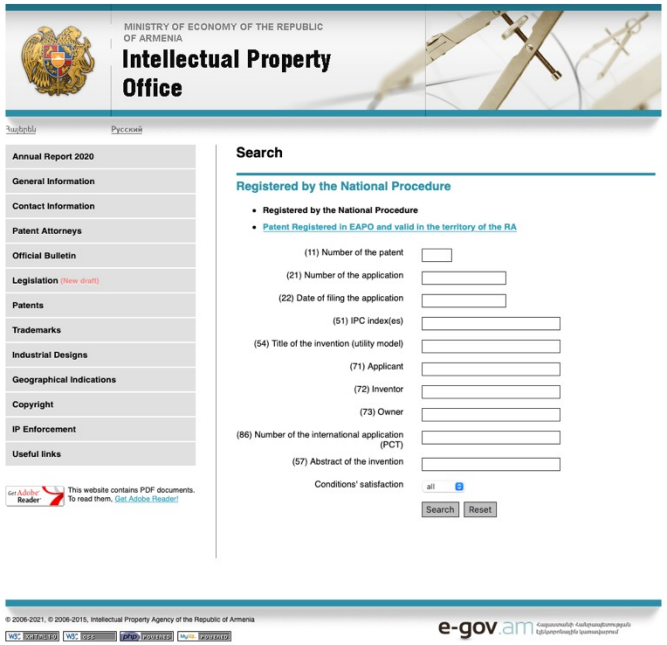
INFORMATION RETRIEVAL

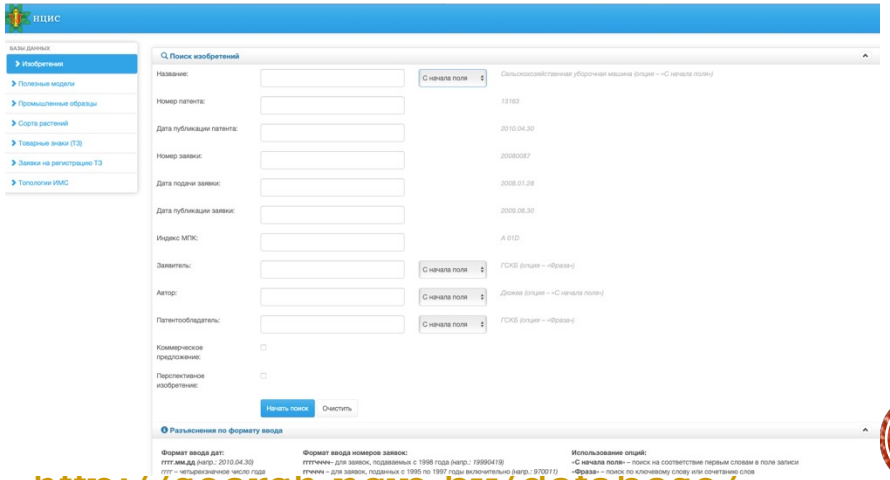


Country	Contact Details	Office	URL
Afghanistan	Copyright Office	Ministry of Information and Culture (MoIC)	
	Industrial Property Office	Afghanistan Central Business Registry & Intellectual Properties Ministry of Industry and Commerce (ACBR-IP)	Web site Web site
Albania	Copyright Office	Copyright Directorate Ministry of Culture Republic of Albania	Web site Web site
	Industrial Property Office	General Directorate of Industrial Property (GDIP) Ministry of Finances and Economy	Web site
Algeria	Copyright Office	National Office of Copyrights and Related Rights Ministry of Culture (ONDA)	Web site
	Industrial Property Office	Algerian National Institute of Industrial Property Ministry of Industry (INAPI)	Web site
Andorra	Copyright Office	Trademarks Office of the Principality of Andorra Secretary of State of Tourism and Trade Ministry of Tourism and Trade	Web site
	Industrial Property Office	Trademarks Office of the Principality of Andorra Secretary of State of Tourism and Trade Ministry of Tourism and Trade	Web site
Angola	Copyright Office	National Service for Copyrights and Related Rights Ministry of Culture, Tourism and Environment	
	Industrial Property Office	Angolan Institute of Industrial Property Ministry of Industry	

https://www.wipo.int/directory/en/urls.jsp



https://www.aipa.am/en/registered-by-



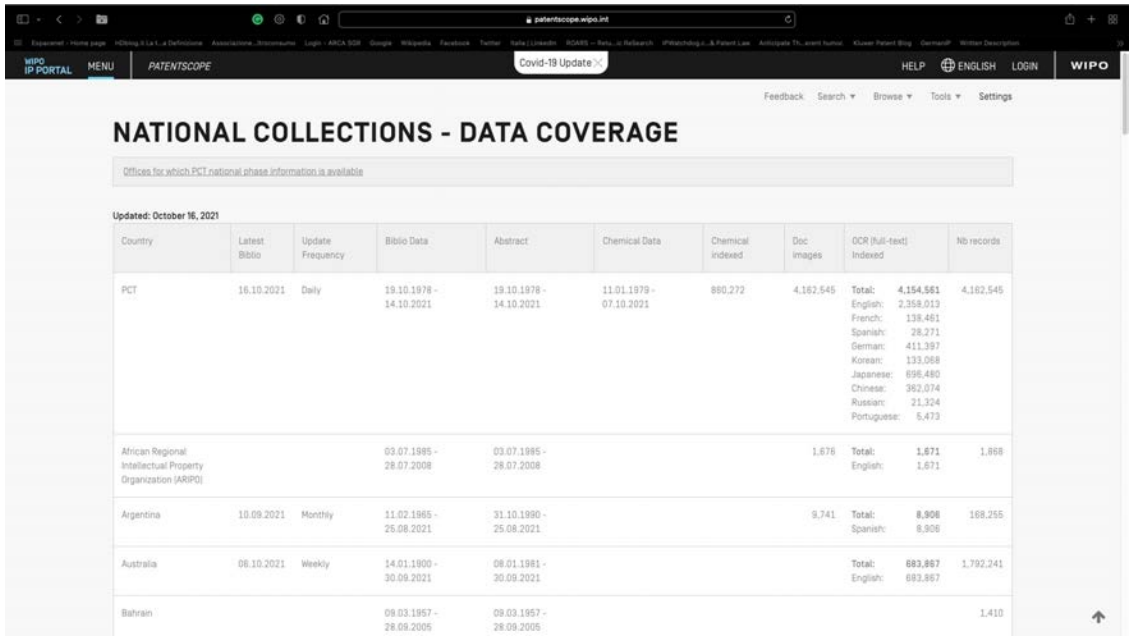
http://search.ncip.by/database/

PATENT DATABASES

- **State free of charge sources** (provided by national or regional patent offices)
  - https://www.wipo.int/directory/en/urls.jsp
  - Espacenet, USPTO, JPO, UIBM, WIPO
- **Free of charge sources** (provided by independent producers)
  - GOOGLE PATENTS, Free Patents Online
- **Professional sources**
  - Orbit Intelligence, Derwent Innovation

PATENT DATABASES

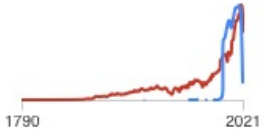
- Patent coverage (https://patentscope.wipo.int/search/en/help/data_coverage.jsf)
  - Number of documents,
  - Bibliographic data, full text
- Period of publication
- Data update, timeliness
- Types of documents
- Search engine



PATENT COVERAGE

Patent offices

CN	JP	**US**	DE	EP	KR	WO	GB	CA	FR
AU	ES	TW	RU	SU	AT	IT	BR	BE	SE
CH	NL	PL	FI	DK	TH	NO	MX	ZA	IL
UA	HU	DD	CS	PT	AR	HK	SG	NZ	CZ
IE	GR	EA	TR	RO	IN	LU	PH	BG	MY
YU	SI	CL	SK	HR	CO	MA	PE	OA	AP
LT	RS	CY	UY	EC	ID	MD	EG	CR	LV
IS	TN	EE	GT	CU	GE	DO	JO	SA	SM
ME	MC	ZM	ZW	PA	HN	SV	NI	DZ	KE
MW	MT	TJ	GC	MN	VN	BA	KZ	BY	UZ
KG	AM	TT	EM	MO					



Grants 12,100,910
Full-text since 1790

Applications 6,641,047
Full-text since 2001

These totals include all patents and published applications in our index, but we cannot guarantee complete coverage. If we're missing anything, please let us know!

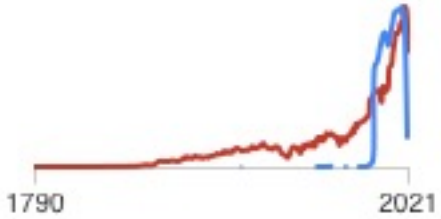
Open Espacenet › Open classic Espacenet

› National patent offices' databases

Espacenet is accessible to beginners and experts and is updated daily. It contains data on more than 130 million patent documents from around the world. Supporting information can help you understand whether a patent has been granted and if it is still in force.

Google Patents

Patent offices



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These totals include all patents and published applications in our index, but we cannot guarantee complete coverage. If we're missing anything, please let us know!

PATENT DATABASES ARE INCOMPLETE!

World Patent Information 66 (2021) 102055

Contents lists available at ScienceDirect

World Patent Information

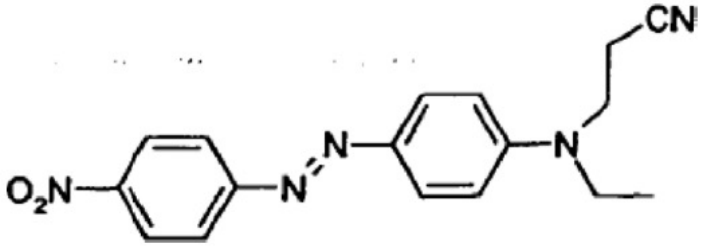
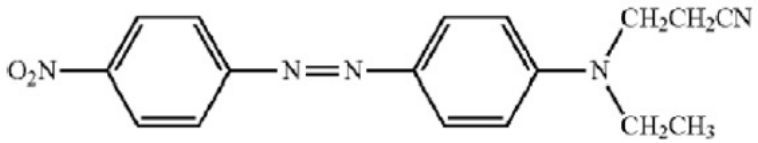
journal homepage: www.elsevier.com/locate/worpatin

Current methodologies for chemical compound searching in patents: A case study

Joerg Ohms

WissInfo GmbH, 79106 Freiburg, Germany

Exemplary structure representations of Disperse Orange 25 in patent publications.

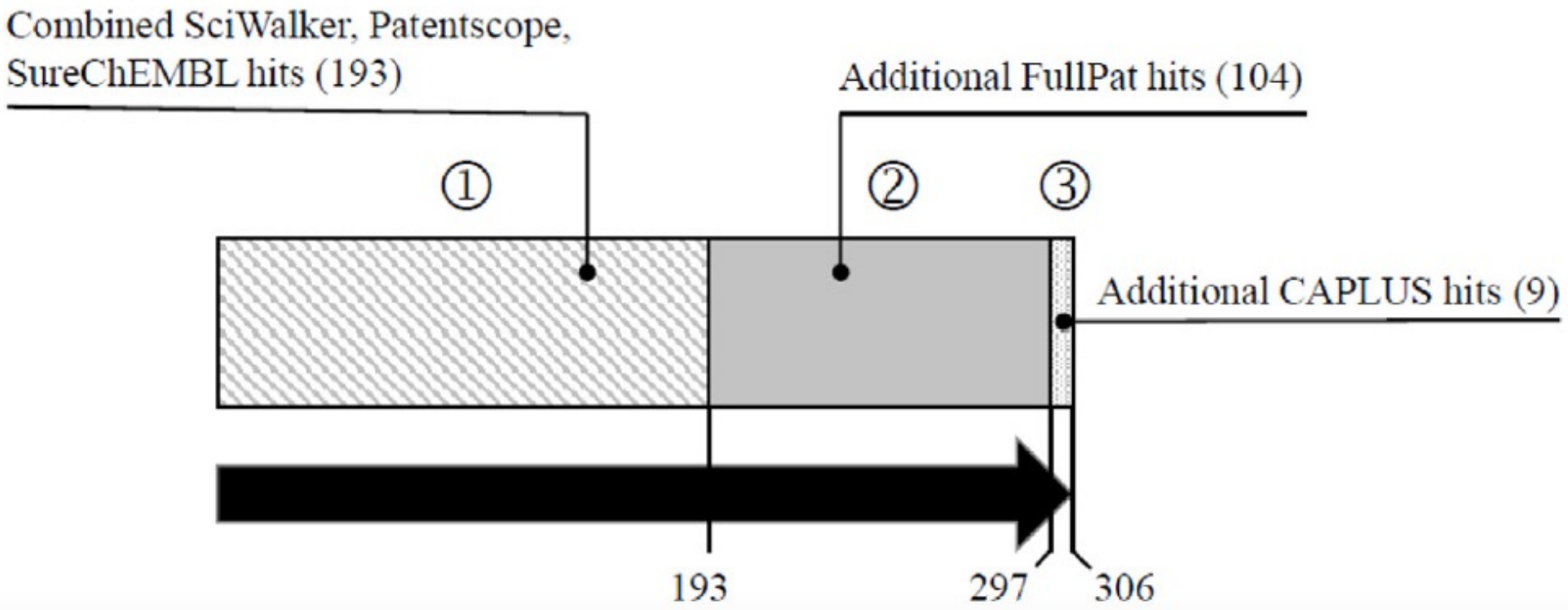
EP 1578871 B1	US 20160312403 A1
	(4-7)  (C.I. Disperse Orange 25)

PATENT DATABASES ARE INCOMPLETE!

Table C.1
Search strategies.

Database	Search strategy
SciWalker	struct:"full:CCN(CCC#N)c1ccc(/N=N/c2ccc ([N+](=O)[O-])cc2)cc1" struct:"full:C1=CC(N(CCC#N)CC)=CC =C1N=NC1=CC=C([N+]([O-])=O)C=C1" struct:"full:CCN(CCC#N)c1ccc(cc1) /N=N2ccc(cc2)N(=O)=O"
SureChEMBL	Basic structure search for ZSPPPAFDNHYXNW-FMQUCBEESA-N Patent authorities: US applications; US patents; EP applications; EP patents; WO
Patentscope	chem:ZSPPPAFDNHYXNW-FMQUCBEESA-N or chem:ZSPPPAFDNHYXNW-UHFFFAOYSA-N Offices:EP;US;WO
FullPat	((DISPERSE W ORANGE 3W 25) OR (SOLVENT W ORANGE 3W 105) OR (DISPERSE W ORANGE 3W 2K) OR (ORANGE W TRANSFORON W U W RL) OR (DIANIX W ORANGE W E W 3RN) OR (DISPERSOL W ORANGE WB W 2R) OR (LATYL W ORANGE W NST) OR (RESIREN W ORANGE W TR) OR (ORANGE W 2K W NITRODYE) OR (FANTAGEN W ORANGE W 2RL) OR (SERILENE W ORANGE W 2RL) OR (31482_56_1))/TI/AB/CLMS/TX AND (WO OR EP OR US)/PC
CAPLUS	s (31482-56-1/bi or disperse orange 25 or solvent orange 105 or dianix orange e 3rn or dispersol b 2r or latyl orange nst or resiren orange tr or orange 2k nitrodye or fantagen orange 2rl or serilene orange 2rl) and (wo or ep or us)/pc

PATENT DATABASES ARE INCOMPLETE!



PATENT DATABASES ARE INCOMPLETE!

	SciWalker	SureChEMBL	Patentscope	FullPat	CAPLUS
No. of patent families		193		287	49
No. of unique families	34	14	-	104	9

CHEMISTRY

- SureChEMBL (https://www.surechembl.org/search/)
- PubChem (https://pubchem.ncbi.nlm.nih.gov)
- Patentscope (https://patentscope.wipo.int/search/en/search.jsf)

- STN (https://www.cas.org/sites/default/files/documents/stnpatentdatabases_0.pdf)

PROTEINS AND NUCLEIC ACIDS

- Geneseq™ (https://clarivate.com/derwent/solutions/geneseq/)
- GenBank (https://www.ncbi.nlm.nih.gov/genbank/)
- PCTGEN (https://www.stn-international.com/en/training-center/documentation/pctgen-stn-brief-description)

World Patent Information 30 (2008) 300–308

Contents lists available at ScienceDirect

World Patent Information

journal homepage: www.elsevier.com/locate/worpatin

4.2. Case study: GENESEQ™ vs. EMBL, NCBI, PCTGEN, NP_001286 (hCCR1 protein)

Fig. 3 compares GENESEQ™ results with the public data sources: GenBank®, EMBL-EBI protein databases and PCTGEN (included as a database of public information). The publications retrieved from the protein (NP_001286) searches are shown organised as patent families (INPADOC version) in which publication numbers on the same horizontal are from the same family.

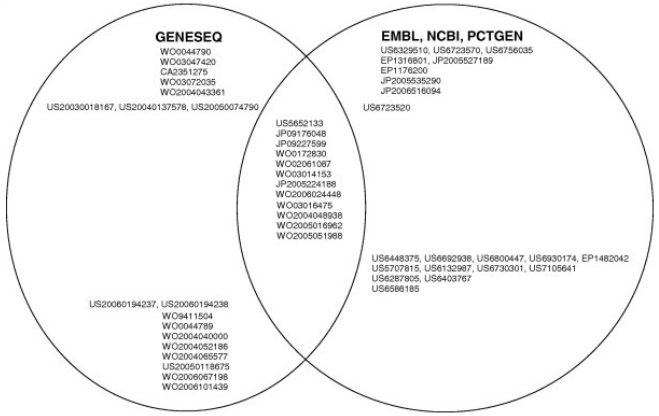


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Fig. 3. Comparison of search results (INPADOC patent families [Publication numbers on the same horizontal are from the same family.]) – GENESEQ™ vs. public data: NP_001286.

AGENDA

- Introduction
- Prior art searches
- Patent databases
- Classification codes
- Example
- Conclusions

PATENT CLASSIFICATION

Classification system	No. of subgroups
IPC	76,000
CPC	250,000
File Index (FI)	190,000
F-terms	350,000

IPC/UIBM

uibm.mise.gov.it

MENU

Ministero dello sviluppo economico

Cerca...

/ BREVETTI / BREVETTO PER INVENZIONE INDUSTRIALE / LA CLASSIFICAZIONE INTERNAZIONALE DEI BRE...

La classificazione internazionale dei brevetti IPC (International Patent Classification). Accordo Strasburgo

La classificazione internazionale dei brevetti IPC (International Patent Classification) rappresenta il sistema più utilizzato a livello internazionale per i brevetti e i modelli d'utilità. Istituita a seguito dell'**Accordo di Strasburgo** del 1971, è strutturata in modo gerarchico e suddivide le tecnologie brevettabili in otto sezioni (A - H), a loro volta distribuite in livelli sempre più dettagliati (sottosezioni, classi, sottoclassi, gruppi e sottogruppi). Viene aggiornata periodicamente: dal 2006 è in vigore l'ottava versione, che contiene circa 70.000 voci. La IPC non viene utilizzata solo per classificare e ricercare brevetti, ma anche pubblicazioni, articoli scientifici e testi tecnici in generale, al fine di valutare lo stato della tecnica in un particolare settore.

Accedi alla Classificazione internazionale (IPC)

ALLEGATI

Accordo di Strasburgo

Ufficio competente

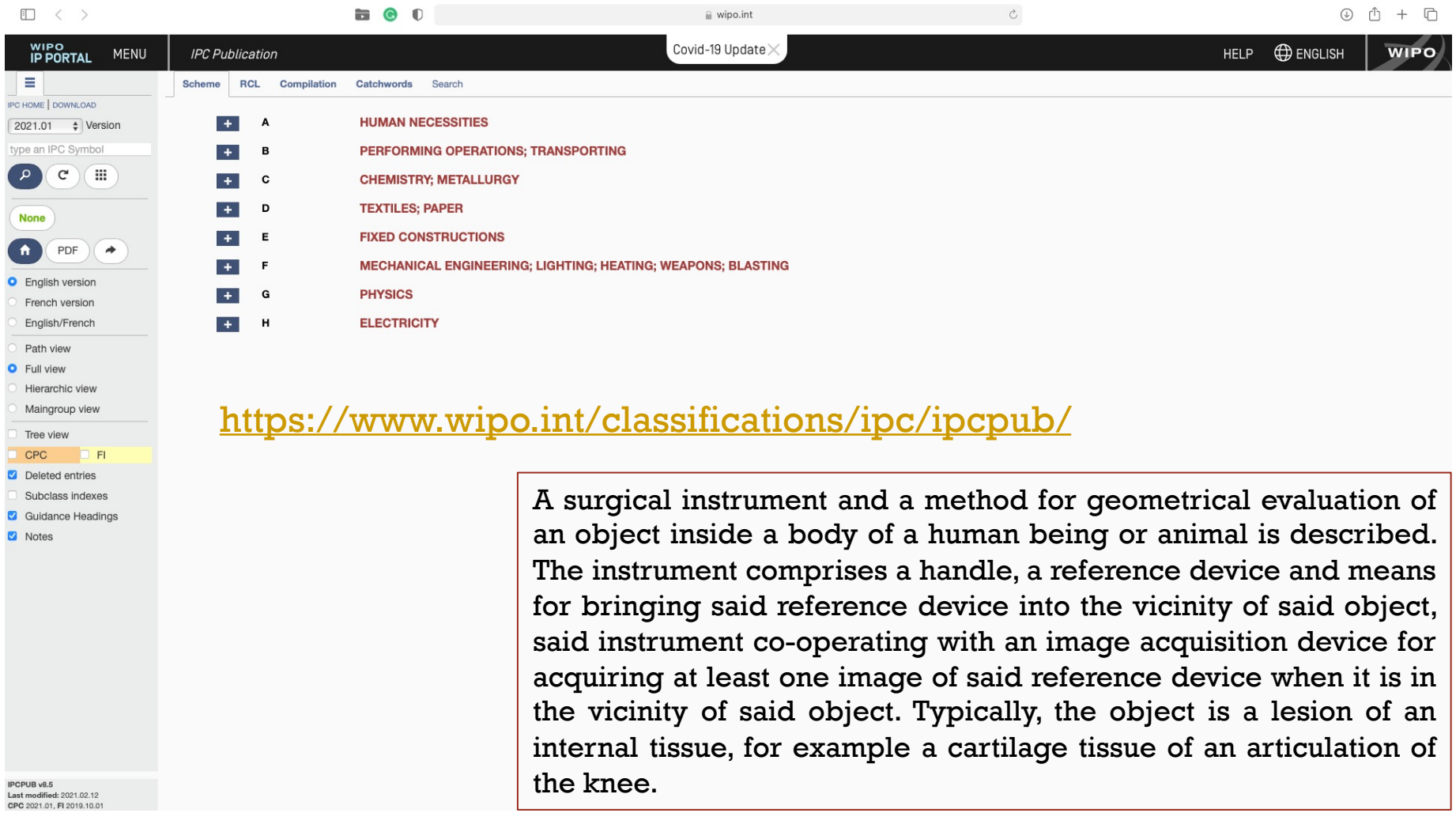
- Divisione VII - Brevetti

Condividi

Brevetto per invenzione industriale

- **La classificazione internazionale dei brevetti IPC (International Patent Classification). Accordo di Strasburgo**
- Chi può brevettare
- Requisiti di brevettabilità
- Vita di un Brevetto
- Deposito di una domanda di brevetto
- Esclusioni dalla brevettabilità
- Brevetto per modello di utilità
- Brevetto per nuova varietà vegetale
- Brevetti e Software
- Certificato di Protezione Complementare
- Privativa comunitaria
- Domande internazionali di brevetto (PCT)

IPC CODES



https://www.wipo.int/classifications/ipc/ipcpub/

A surgical instrument and a method for geometrical evaluation of an object inside a body of a human being or animal is described. The instrument comprises a handle, a reference device and means for bringing said reference device into the vicinity of said object, said instrument co-operating with an image acquisition device for acquiring at least one image of said reference device when it is in the vicinity of said object. Typically, the object is a lesion of an internal tissue, for example a cartilage tissue of an articulation of the knee.

IPC CODES

IPCCAT

★ **Predictions**

3 A61B 1/317
3 A61F 2/30
3 A61B 90/00
3 A61F 2/38
2 A61B 5/107

Bibliographic data: ITMI20040260 (A1) — 2004-05-17

In my patents list | Previous | 8 / 8 | Next | Report data error | Print

METHOD AND INSTRUMENT FOR THE GEOMETRICAL EVALUATION OF LESIONS AFFECTING TISSUES OR INTERNAL ORGANS

Page bookmark	ITMI20040260 (A1) - METHOD AND INSTRUMENT FOR THE GEOMETRICAL EVALUATION OF LESIONS AFFECTING TISSUES OR INTERNAL ORGANS
Inventor(s):	RAIMONDI MANUELA TERESA +
Applicant(s):	MILANO POLITECNICO +
Classification:	- international: ***A61B1/317; A61B19/00; A61B5/107; A61F2/46;*** *A61B17/00; A61B17/22; A61F2/30; A61F2/38*
	- cooperative: **A61B1/317 (EP); A61B5/1076 (EP); A61B90/36 (EP);** A61B17/221 (EP); A61B2017/00238 (EP); A61B2090/061 (EP); A61B2090/373 (EP); A61B5/4514 (EP); A61B5/4528 (EP); A61F2/30756 (EP); A61F2/38 (EP); A61F2/4657 (EP); A61F2002/4635 (EP)
Application number:	IT2004MI00260 20040217
Priority number(s):	IT2004MI00260 20040217
Also published as:	→ EP1715801 (A1) → EP1715801 (B1) US2007161852 (A1) WO2005077292 (A1)

A61B1 A61B5 A61F2

IPC CODES

worldwide.espacenet.com

Espacenet - Bibliographic data | Espacenet – search results

Espacenet Patent search

ta all "cartilage tissue" AND ipc any "A61B5"

Office/Language

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Home > Results

Query language: en de fr

AND + Field

Title or abstract all → Group

cartilage tissue

IPC any → Group

A61B5

Search Reset

48 results found

List view: Text only | List content: All | Sort by: Relevance

(0 patents selected) Select the first 48 results

... of age. To perform the method, histological preparations of the right plate of human thyroid cartilage are studied, conduct photo-taking of images and measurement with the help of special software the following indicators: average area of adipose tissue in... trabeculae (mcm), area of the cartilage tissue in

33. Technique for manipulating medical images
US2002147392A1 (B2) • 2002-10-10 • LANG PHILIPP
Earliest priority: 2000-09-14 • Earliest publication: 2002-03-21
... for extracting tissues (i.e., assigning tissue boundary locations) from medical images. These techniques can be applied to diagnosing arthritis and for monitoring disease progression or response to therapeutic intervention. The invention provides for means to extract the articular cartilage from medical

34. METHOD AND INSTRUMENT FOR THE GEOMETRICAL EVALUATION OF LE…
WO2005077292A1 • 2005-08-25 • MILANO POLITECNICO [IT]
Earliest priority: 2004-02-17 • Earliest publication: 2004-05-17
... object is a lesion of an internal tissue, for example a cartilage tissue of an articulation of the knee.

35. Structural quantification of cartilage changes using statistical parametric map…
US2008200840A1 • 2008-08-21 • No applicant available
Earliest priority: 2007-02-16 • Earliest publication: 2008-08-21
The analysis of the focal changes in the morphology of a tissue such as cartilage is completed through statistical parametric...

36. CAMERA ARRANGEMENT AND IMAGE PROCESSING METHOD FOR QUAN…
WO2013118065A1 • 2013-08-15 • BIOOPTICO AB [SE]
Earliest priority: 2012-02-06 • Earliest publication: 2013-08-15
... cartilage using endoscopes. A structure enhancement method comprises obtaining input data, conversion to intensity data, preprocess filtering, intensity fluctuation filtering...

IPC CODES

wipo.int

International Patent Classification (IPC) | IPC Publication

WIPO IP PORTAL | MENU | *IPC Publication* | Covid-19 Update | HELP | ENGLISH | WIPO

Scheme | RCL | Compilation | Catchwords | Search

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2021.01 Version

A61B 5/00

A61B 5/00

PDF

- English version
- French version
- English/French
- Path view
- Full view
- Hierarchic view
- Maingroup view
- Tree view
- CPC FI
- Deleted entries
- Subclass indexes
- Guidance Headings
- Notes

	A61B 3/103	• • for determining refraction, e.g. refractometers, skiascopes [2006.01]
	A61B 3/107	• • for determining the shape or measuring the curvature of the cornea [2006.01]
	A61B 3/11	• • for measuring interpupillary distance or diameter of pupils [2006.01]
D	A61B 3/113	• • for determining or recording eye movement [2006.01]
	A61B 3/117	• • for examining the anterior chamber or the anterior chamber angle, e.g. gonioscopes [2006.01]
	A61B 3/12	• • for looking at the eye fundus, e.g. ophthalmoscopes (A61B 3/13 takes precedence) [2006.01]
D	A61B 3/125	• • • with contact lenses [2006.01]
	A61B 3/13	• • Ophthalmic microscopes [2006.01]
	A61B 3/135	• • • Slit-lamp microscopes [2006.01]
	A61B 3/14	• • Arrangements specially adapted for eye photography [2006.01]
	A61B 3/15	• • • with means for aligning, spacing or blocking spurious reflection [2006.01]
	A61B 3/16	• • for measuring intraocular pressure, e.g. tonometers [2006.01]
	A61B 3/18	• Arrangement of plural eye-testing or -examining apparatus [2006.01]
	A61B 5/00	**Measuring for diagnostic purposes** (radiation diagnosis A61B 6/00; diagnosis by ultrasonic, sonic or infrasonic waves A61B 8/00)**; Identification of persons** [2006.01] Note(s) [7] In this group, the following term is used with the meaning indicated: • "measuring" covers also detecting or recording.
D	A61B 5/01	• Measuring temperature of body parts (clinical contact thermometers G01K 13/20) [2006.01]
	A61B 5/02	• Measuring pulse, heart rate, blood pressure or blood flow; Combined pulse/heart-rate/blood pressure determination; Evaluating a cardiovascular condition not otherwise provided for, e.g. using combinations of techniques provided for in this group with electrocardiography; Heart catheters for measuring blood pressure [2006.01]
	A61B 5/0205	• • Simultaneously evaluating both cardiovascular conditions and different types of body conditions, e.g. heart and respiratory condition [2006.01]
	A61B 5/021	• • Measuring pressure in heart or blood vessels (A61B 5/0205 takes precedence) [2006.01]
D	A61B 5/0215	• • • by means inserted into the body [2006.01]
	A61B 5/022	• • • by applying pressure to close blood vessels, e.g. against the skin; Ophthaldynamometers [2006.01]
	A61B 5/0225	• • • • the pressure being controlled by electric signals, e.g. derived from Korotkoff sounds [2006.01]
	A61B 5/023	• • • • the pressure transducers comprising a liquid column [2006.01]
	A61B 5/0235	• • • • Valves specially adapted therefor [2006.01]
	A61B 5/024	• • Measuring pulse rate or heart rate (A61B 5/0205, A61B 5/021 take precedence) [2006.01]
	A61B 5/0245	• • • using sensing means generating electric signals [2006.01]
D	A61B 5/025	• • • • within occluders, e.g. responsive to Korotkoff sounds [2006.01]
	A61B 5/0255	• • • Recording instruments specially adapted therefor [2006.01]
	A61B 5/026	• • Measuring blood flow [2006.01]
	A61B 5/0265	• • • using electromagnetic means, e.g. electromagnetic flow meter [2006.01]
	A61B 5/027	• • • • using catheters [2006.01]
	A61B 5/0275	• • • using tracers, e.g. dye dilution [2006.01]
	A61B 5/028	• • • • by thermo-dilution [2006.01]

IPCPUB v8.5
Last modified: 2021.02.12
CPC 2021.01, FI 2019.10.01

CPC CODES

The **Cooperative Patent Classification (CPC)** is an extension of the IPC and is jointly managed by the EPO and the US Patent and Trademark Office. It is divided into nine sections, A-H and Y, which in turn are sub-divided into classes, sub-classes, groups and sub-groups. There are approximately 250 000 classification entries.

The nine CPC sections	
A	Human necessities
B	Performing operations; transporting
C	Chemistry; metallurgy
D	Textiles; paper
E	Fixed constructions
F	Mechanical engineering; lighting; heating; weapons; blasting engines or pumps
G	Physics
H	Electricity
Y	General tagging of new technological developments; general tagging of cross-sectional technologies spanning over several sections of the IPC; technical subjects covered by former USPC cross-reference art collections [XRACs] and digests

Each section is divided into classes, which are further subdivided into subclasses, main- and subgroups

https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=A

A61 (A61B, A61F, A61G, A61H, A61N)

A61F 5/00	**Orthopaedic methods or devices for non-surgical treatment of bones or joints** (surgical instruments or methods for treatment of bones or joints, devices specially adapted therefor A61B 17/56); **Nursing devices;** {Anti-rape devices} (bandages, dressings or absorbent pads A61F 13/00)	D

C07 C12

Telemedicina (G16H)
https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=G16H

IPC: A61

A61	MEDICAL OR VETERINARY SCIENCE; HYGIENE
A61B	DIAGNOSIS; SURGERY; IDENTIFICATION (analysing biological material G01N, e.g. G01N 33/48; obtaining records using waves other than optical waves, in general G03B 42/00)
A61C	DENTISTRY; APPARATUS OR METHODS FOR ORAL OR DENTAL HYGIENE (non-driven toothbrushes A46B; {tongue scrapers A61B 17/24;} preparations for dentistry A61K 6/00; preparations for cleaning the teeth or mouth A61K 8/00, A61Q 11/00)
A61D	VETERINARY INSTRUMENTS, IMPLEMENTS, TOOLS, OR METHODS
A61F	FILTERS IMPLANTABLE INTO BLOOD VESSELS; PROSTHESES; DEVICES PROVIDING PATENCY TO, OR PREVENTING COLLAPSING OF, TUBULAR STRUCTURES OF THE BODY, e.g. STENTS; ORTHOPAEDIC, NURSING OR CONTRACEPTIVE DEVICES; FOMENTATION; TREATMENT OR PROTECTION OF EYES OR EARS; BANDAGES, DRESSINGS OR ABSORBENT PADS; FIRST-AID KITS (dental prosthetics A61C)
A61G	TRANSPORT, PERSONAL CONVEYANCES, OR ACCOMMODATION SPECIALLY ADAPTED FOR PATIENTS OR DISABLED PERSONS (appliances for aiding patients or disabled persons to walk A61H 3/00); OPERATING TABLES OR CHAIRS; CHAIRS FOR DENTISTRY; FUNERAL DEVICES (embalming corpses A01N 1/00)
A61H	PHYSICAL THERAPY APPARATUS, e.g. DEVICES FOR LOCATING OR STIMULATING REFLEX POINTS IN THE BODY; ARTIFICIAL RESPIRATION; MASSAGE; BATHING DEVICES FOR SPECIAL THERAPEUTIC OR HYGIENIC PURPOSES OR SPECIFIC PARTS OF THE BODY (electrotherapy, magnetotherapy, radiation therapy, ultrasound therapy A61N)
A61J	CONTAINERS SPECIALLY ADAPTED FOR MEDICAL OR PHARMACEUTICAL PURPOSES; DEVICES OR METHODS SPECIALLY ADAPTED FOR BRINGING PHARMACEUTICAL PRODUCTS INTO PARTICULAR PHYSICAL OR ADMINISTERING FORMS; DEVICES FOR ADMINISTERING FOOD OR MEDICINES ORALLY; BABY COMFORTERS; DEVICES FOR RECEIVING SPITTLE
A61K	PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES (devices or methods specially adapted for bringing pharmaceutical products into particular physical or administering forms A61J 3/00; chemical aspects of, or use of materials for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles A61L; soap compositions C11D)
A61L	METHODS OR APPARATUS FOR STERILISING MATERIALS OR OBJECTS IN GENERAL; DISINFECTION, STERILISATION, OR DEODORISATION OF AIR; CHEMICAL ASPECTS OF BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES; MATERIALS FOR BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES (preservation of bodies or disinfecting characterised by the agent employed A01N; preserving, e.g. sterilising, food or foodstuffs A23; preparations for medical, dental or toilet purposes A61K; preparation of ozone C01B 13/10)
A61M	DEVICES FOR INTRODUCING MEDIA INTO, OR ONTO, THE BODY (introducing media into or onto the bodies of animals A61D 7/00; means for inserting tampons A61F 13/26; devices for administering food or medicines orally A61J; containers for collecting, storing or administering blood or medical fluids A61J 1/05); DEVICES FOR TRANSDUCING BODY MEDIA OR FOR TAKING MEDIA FROM THE BODY (surgery A61B; chemical aspects of surgical articles A61L); DEVICES FOR PRODUCING OR ENDING SLEEP OR STUPOR {(Electrotherapy, e.g. producing anaesthesia by the use of alternating or intermittent currents A61N 1/36021)}
A61N	ELECTROTHERAPY; MAGNETOTHERAPY; RADIATION THERAPY; ULTRASOUND THERAPY (measurement of bioelectric currents A61B; surgical instruments, devices or methods for transferring non-mechanical forms of energy to or from the body A61B 18/00; anaesthetic apparatus in general A61M; incandescent lamps H01K; infra-red radiators for heating H05B)
A61P	SPECIFIC THERAPEUTIC ACTIVITY OF CHEMICAL COMPOUNDS OR MEDICINAL PREPARATIONS
A61Q	SPECIFIC USE OF COSMETICS OR SIMILAR TOILET PREPARATIONS

TELEMEDICINE

Espacenet
Patent search

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Classification search

g16H | Search

Index | A | B | C | D | E | F | G | H | Y

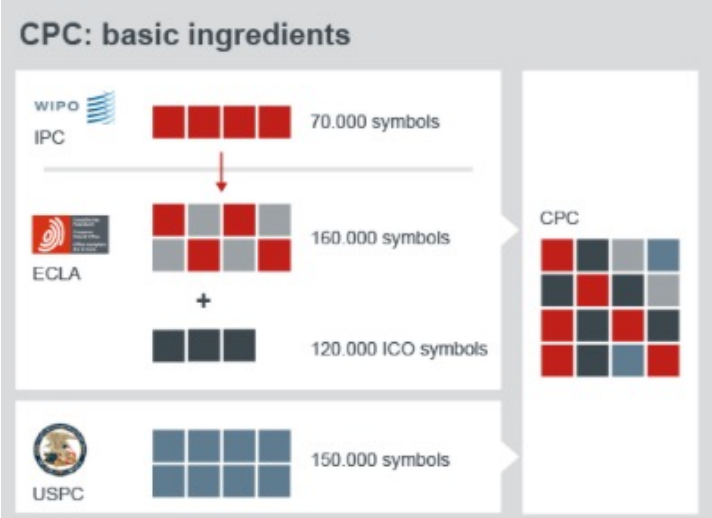
CPC | [...] | 2000

« G16C99/00 G16H10/00 »

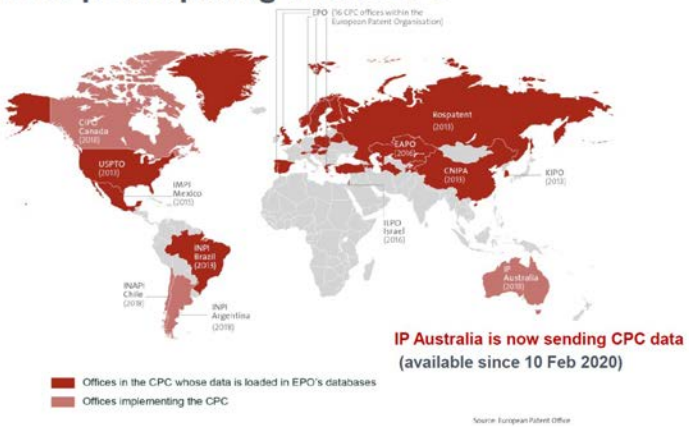
Classification symbol	Title and description	
G	PHYSICS	S
G16	INFORMATION AND COMMUNICATION TECHNOLOGY [ICT] SPECIALLY ADAPTED FOR SPECIFIC APPLICATION FIELDS	
G16H	HEALTHCARE INFORMATICS, i.e. INFORMATION AND COMMUNICATION TECHNOLOGY [ICT] SPECIALLY ADAPTED FOR THE HANDLING OR PROCESSING OF MEDICAL OR HEALTHCARE DATA	S D
G16H 10/00	ICT specially adapted for the handling or processing of patient-related medical or healthcare data (for medical reports G16H 15/00; for therapies or health-improving plans G16H 20/00; for the handling or processing of medical images G16H 30/00)	D
G16H 15/00	ICT specially adapted for medical reports, e.g. generation or transmission thereof	D
G16H 20/00	ICT specially adapted for therapies or health-improving plans, e.g. for handling prescriptions, for steering therapy or for monitoring patient compliance	D
G16H 30/00	ICT specially adapted for the handling or processing of medical images (computerised tomography A61B 6/03)	D
G16H 40/00	ICT specially adapted for the management or administration of healthcare resources or facilities; ICT specially adapted for the management or operation of medical equipment or devices	D
G16H 50/00	ICT specially adapted for medical diagnosis, medical simulation or medical data mining; ICT specially adapted for detecting, monitoring or modelling epidemics or pandemics	D
G16H 70/00	ICT specially adapted for the handling or processing of medical references	D
G16H 80/00	ICT specially adapted for facilitating communication between medical practitioners or patients, e.g. for collaborative diagnosis, therapy or health monitoring	D

https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=G

CPC



29 Offices participating in the CPC



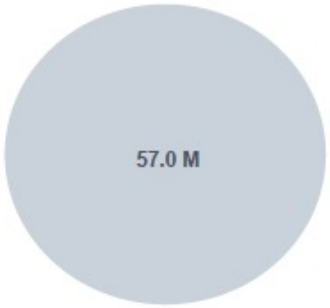
IP Australia is now sending CPC data
(available since 10 Feb 2020)

CPC coverage EPO core collection

Country	Country Code	Total Number of Bibliographic Data Records (source: EPODOC on 05/02/2020)	Number of Bibliographic Data Records classified in CPC	% of Bibliographic Data Records classified in CPC
EPO	EP	3.592.456	3.590.219	99,9%
United States	US*	12.834.263	12.822.785	99,9%
Austria	AT	1.008.631	723.590	71,7%
Belgium	BE	589.019	555.383	94,3%
Switzerland	CH	719.173	580.443	80,7%
Germany	DE	5.756.720	4.956.846	86,1%
France	FR	2.460.929	2.440.721	99,2%
United Kingdom	GB	2.409.191	2.153.523	89,4%
Luxembourg	LU	63.216	32.192	50,9%
The Netherlands	NL	551.987	539.484	97,7%
ARIPO	AP	4.073	3.992	98,0%
Australia	AU	1.498.948	1.203.520	80,3%
Canada	CA	2.497.260	1.385.029	55,5%
OAPI	OA	13.432	13.207	98,3%
WIPO	WO	3.713.592	3.703.858	99,7%
	TOTAL	37.712.890	34.704.792	

*US A and B Publications only

+ family propagation
+ 1.5 M NPL documents



57 M documents classified in the CPC

Publications with allocations from national offices

Country	Country Code	Total Number of Bibliographic Data Records (source: EPODOC on 05/02/2020)	Overall Number of publications classified in CPC (Family level)	Number of publications classified by the national office
Australia (14 Feb 2020)	AU	1.500.883	4.372	3.775 (1.966 WO and 1.809 AU)
Austria	AT	1.008.631	723.590	11.530
Brazil	BR	740.900	508.861	25.536
China	CN	20.632.269	6.903.470	4.420.981
Czech Republic	CZ	95.434	45.135	1.099
EAPO	EA	54.606	49.101	3.569
Finland	FI	197.351	119.187	9.862
Greece	GR	101.097	54.600	7.025
Israel	IL	109.538	95.471	1.218
Korea	KR	4.153.209	2.748.463	1.774.957
Mexico	MX	317.703	290.397	1.567
Norway	NO	208.845	182.975	9.512
Portugal	PT	131.318	120.947	575
Russian Fed.	RU	1.088.882	353.414	131.475
Spain	ES	1.412.323	735.927	38.190
Sweden	SE	523.374	336.137	145.431
Switzerland	CH	719.173	580.443	3.544
United Kingdom	GB	2.409.191	2.153.523	159.961
	TOTAL	33.903.844	16.001.641	6.746.032

CPC

Main Trunk (Sections A-H)	Section Y
Main trunk symbols Used for Invention or Additional information • 647 subclasses • Approx. 160K symbols	**Y symbols** Used for Additional information only • 8 subclasses • Approx. 7K symbols • For tagging of emerging cross sectional technologies
Indexing codes – 2000 series Used for Additional information only • Approx. 82K symbols, including - breakdown indexing - orthogonal indexing - IPC indexing codes	
Combination-Sets (C-Sets) Used for Invention or Additional information • Restricted to 37 subclasses most in chemical areas	

https://worldwide.espacenet.com/patent/cpc-browser#!/CPC=A61F2/00

pn=US5645599A https://worldwide.espacenet.com

HIERARCHY

CPC [...] 2000

« C01B25/00 C01B33/00 »

Classification symbol	Title and description	
C	CHEMISTRY; METALLURGY	S
	CHEMISTRY	
C01	INORGANIC CHEMISTRY	
C01B	NON-METALLIC ELEMENTS; COMPOUNDS THEREOF; {METALLOIDS OR COMPOUNDS THEREOF NOT COVERED BY SUBCLASS C01C}	S D
	Oxygen; Oxides or hydroxides in general; Per-compounds	
C01B 32/00	Carbon; Compounds thereof (C01B 21/00, C01B 23/00 take precedence; percarbonates C01B 15/10; carbon black C09C 1/48)	D
C01B 32/15	• Nano-sized carbon materials	
C01B 32/182	• • Graphene	D
C01B 32/184	• • • Preparation	
C01B 32/186	• • • • by chemical vapour deposition [CVD]	D
C01B 32/188	• • • • by epitaxial growth	
C01B 32/19	• • • • by exfoliation	
C01B 32/192	• • • • • starting from graphitic oxides	
C01B 32/194	• • • After-treatment	D
C01B 32/196	• • • • Purification	
C01B 32/198	• • • Graphene oxide	

EXAMPLE OF CLASSIFICATION CODES

CPC [...] 2000

« C01B25/00 C01B33/00 »

Classification symbol	Title and description	
C	CHEMISTRY; METALLURGY	S
	CHEMISTRY	
C01	INORGANIC CHEMISTRY	
C01B	NON-METALLIC ELEMENTS; COMPOUNDS THEREOF; {METALLOIDS OR COMPOUNDS THEREOF NOT COVERED BY SUBCLASS C01C}	S D
	Oxygen; Oxides or hydroxides in general; Per-compounds	
C01B 32/00	Carbon; Compounds thereof (C01B 21/00, C01B 23/00 take precedence; percarbonates C01B 15/10; carbon black C09C 1/48)	D
C01B 32/15	• Nano-sized carbon materials	
C01B 32/182	•• Graphene	D
C01B 32/184	••• Preparation	
C01B 32/186	•••• by chemical vapour deposition [CVD]	D
C01B 32/188	•••• by epitaxial growth	
C01B 32/19	•••• by exfoliation	
C01B 32/192	••••• starting from graphitic oxides	
C01B 32/194	••• After-treatment	D
C01B 32/196	•••• Purification	
C01B 32/198	••• Graphene oxide	

EXAMPLE OF CLASSIFICATION CODES

❑ Section	**C** (chemistry, metallurgy)
❑ Class	**C01** (inorganic chemistry)
❑ Subclass	**C01B** (non-metallic compounds)
❑ Group	**C01B 32/00** (carbon and carbon compounds)
❑ Subgroup	C01B 32/05 (preparation or purification of carbon)
❑ Subgroup	C01B 32/15 (nano-sized carbon materials)
❑ Subgroup	**C01B 32/182** (graphene)

RULES (1)

- The claimed invention will only classified **at the lowest level** of the classification hierarchy which describes best the underlying technology ("*last place rule*")

- A classification symbol **is not cumulative**, which means that the set of patents which is classified at a higher level of hierarchy does not include patents which are classified at a lower hierarchical level

RULES (2)

CPC [...] 2000 « C01B25/00 C01B33/00 »

Classification symbol	Title and description	
C	CHEMISTRY; METALLURGY	S
	CHEMISTRY	
C01	INORGANIC CHEMISTRY	
C01B	NON-METALLIC ELEMENTS; COMPOUNDS THEREOF; {METALLOIDS OR COMPOUNDS THEREOF NOT COVERED BY SUBCLASS C01C}	S D
	Oxygen; Oxides or hydroxides in general; Per-compounds	
C01B 32/00	Carbon; Compounds thereof (C01B 21/00, C01B 23/00 take precedence; percarbonates C01B 15/10; carbon black C09C 1/48)	D
C01B 32/15	• Nano-sized carbon materials	
C01B 32/158	• • Carbon nanotubes	D
C01B 32/159	• • • single-walled	
C01B 32/16	• • • Preparation	
C01B 32/162	• • • • characterised by catalysts	D
C01B 32/164	• • • • involving continuous processes	D
C01B 32/166	• • • • in liquid phase	
C01B 32/168	• • • After-treatment	D
C01B 32/17	• • • • Purification	
C01B 32/172	• • • • Sorting	D
C01B 32/174	• • • • Derivatisation; Solubilisation; Dispersion in solvents	
C01B 32/176	• • • • Cutting	
C01B 32/178	• • • • Opening; Filling	D

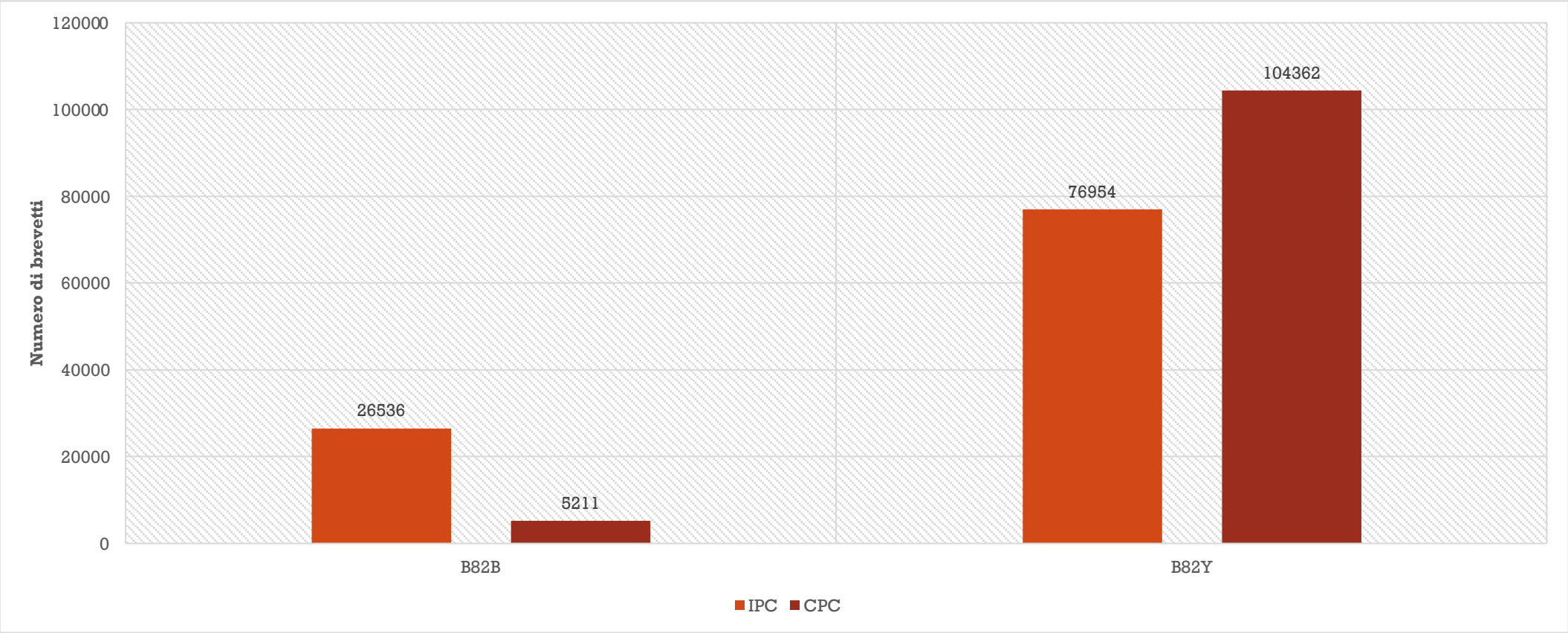
Example: graphene (C01B32/182) [LAST PLACE RULE]

But the patent application claims carbon nanotubes too

How the application will be classified?

NANOTECHNOLOGY

https://www.soc.chim.it/sites/default/files/chimind/pdf/2021_5_5233_on.pdf



ipc=B82Y NOT (cpc=A OR cpc=B OR cpc=C OR cpc=D OR cpc=E OR cpc=F OR cpc=G OR cpc=H) → 19,949

INCOMPLETE SEARCH!

Technological Forecasting & Social Change 165 (2021) 120505

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journal homepage: www.elsevier.com/locate/techfore

Comparative patent analysis for the identification of global research trends for the case of battery storage, hydrogen and bioenergy

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Table 5
Considered technologies and their corresponding keywords, CPC and IPC (Umweltbundesamt, 2020), (WIPO, 2017) and (Müller et al., 2014)

Technology field	Technology keyword	CPC main and subclasses	Groups & subgroups	Boolean search terms	Total Patent number
Stationary battery storage	Li-ion battery	H01M Y02E Y02T	10/052 60/122 10/7011	ti=(Lithium Ion battery) or ti=(Li-Ion Battery) or ti=(Lithium-Ion Battery) or (lithium Ion cell) or (lithium-Ion cell) and (cpc = H01M10/052 or cpc = Y02E60/122 or cpc = Y02T10/7011)	5822
Hydrogen	Alkaline water electrolysis	C25B Y02E	60/366 1/04 and other	cl=C25B1 or cl=C25B9 or cl=C25B11 or C25B13 or C25B15 or cl=Y02E60/366 and ti=electroly* and ti=alkaline pd within "19950101 20181231"	204
Bioenergy	Pyrolysis and gasification	C10J Y02E	2300/0926 50	"ta=Pyroly* and ta=Gasif* and CPC=(Y02E50 or C10J2300/0926) pd within "19950101 20181231"	841

H01M10/052 (CPC) = 24.172
H01M10/052 (IPC) = 38.684

AGENDA

- Introduction
- Prior art searches
- Patent databases
- Classification codes
- Example
- Conclusions

RARE EARTH METALS FROM WASTE ELECTRONICS

- C01F17/00

Codice di classificazione	Definizione
Y02P 10/20	Recycling
C22B 59/00	Obtaining rare earth
H01F 1/053	Alloys containing rare earth metals
H01F 1/15325	Amorphous metallic alloys containing rare earth
C12R 1/00	Processes using microorganisms
C12N 1/00	Microorganisms

Y02W30/50
Y02W30/82

▲ ☐	Y02W 30/00	**Technologies for solid waste management**
☐	Y02W 30/50	• Reuse, recycling or recovery technologies
☐	Y02W 30/82	• • Recycling of waste of electrical or electronic equipment [WEEE]

SEARCH QUERY EXAMPLE

https://www.soc.chim.it/sites/default/files/chimind/pdf/2021_2_5123_on.pdf

	N° DI RISULTATI	DESCRIZIONE
1	7.064	(RARE EARTH AND RECOVER+)/TI/AB/CLMS
2	5.880	(RECOVER+ OR RECYCL+ OR RECUPERAT+)/TI/AB/CLMS/DESC/ODES AND (C01F-017+ OR C22B-059/00 OR H01F-001/053+ OR H01F-001/15325 OR Y02P-10/20)/IPC/CPC
3	716	((RECOVER+ OR RECYCL+ OR RECUPERAT+)/TI/AB/CLMS/DESC/ODES AND (WEEE OR "E_WASTE" OR PHONE? OR TABLET? OR COMPUTER OR "WASTE ELECTRICAL ELECTRONIC EQUIPMENT" OR HARD_DISK_DRIVE OR "ELECTRONIC WASTE")/TI/AB/DESC/ODES/CLMS) AND (C01F-017+ OR C22B-059/00 OR H01F-001/053+ OR H01F-001/15325 OR Y02P-10/20)/IPC/CPC
4	13	((RECOVER+ OR RECYCL+ OR RECUPERAT+)/TI/AB/CLMS/DESC/ODES AND (WEEE OR "E_WASTE" OR PHONE? OR TABLET? OR COMPUTER OR "WASTE ELECTRICAL ELECTRONIC EQUIPMENT" OR HARD_DISK_DRIVE OR "ELECTRONIC WASTE")/TI/AB/CLMS/DESC/ODES) AND ((C01F-017+ OR C22B-059/00 OR H01F-001/053+ OR H01F-001/15325 OR Y02P-10/20) AND (C12R+ OR C12N+))/IPC/CPC

AGENDA

- Introduction
- Prior art searches
- Patent databases
- Classification codes
- Example
- Conclusions

CONCLUSIONS

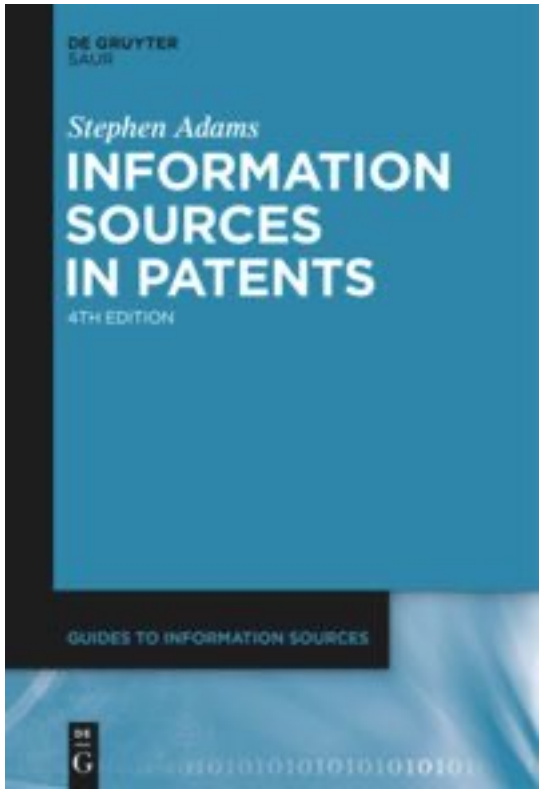
- Patent databases are incomplete
  - *Check patent coverage*
- In a prior art search use both classification systems (IPC and CPC)
  - *IPC is mandatory for Patent Offices*
- Use a combination of keywords and classification codes
  - Title/Abstract/Claims

Annualmente sono depositate, in tutto il mondo, milioni di domande di brevetto *(che non sono solo documenti legali ma anche tecnici) e altrettante sono concesse dagli uffici brevetti.*

Come è possibile reperire questo tipo di informazioni? Si può usare Google? Esistono banche dati specifiche? *L'obiettivo di questo manuale breve è proprio quello di rispondere a questi interrogativi, o meglio di fornire le nozioni di base per poter effettuare le cosiddette ricerche di prior art, utili per sapere se una tecnologia è già nota, se è disponibile perché di dominio pubblico oppure se è stata brevettata (e quindi non può essere commercializzata senza il consenso del titolare e neppure ri-brevettata, per mancanza del requisito di novità) e se il corrispondente brevetto è ancora attivo e valido.*

Il manuale è corredato di esercizi che aiuteranno il lettore a comprendere meglio le sezioni teoriche.

https://www.sprintsoluzionieditoriali.it/le-ricerche-brevettuali



https://www.degruyter.com/document/doi/10.1515/9783110552263/html?lang=en