

Qualified Patent Information Professionals

Recommendations about training and education

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0. Introduction

The present document has been produced by the Training and Education Working Group of CEPIUG (Confederacy of European Patent Information User Groups) with the support of the QPIP Coordinators Team.

A "Patent information professional" is a person who searches, interprets, analyses and reports on patent information and other information such as scientific, technical, business, and legal information to support decision-making concerning legal questions arising from patent law.

A "Qualified Patent Information Professional (QPIP)" is a person who has met the requirements in order to be registered as a Qualified Patent Information Professional.

The document aims to be a reference tool for candidates of the certification for patent information professionals, but should also prove useful to other patent information practitioners who require specific guidance as part of their continued professional development. Higher education institutions, schools and patent information trainers may also find the document a useful tool to help align their course offerings with the aim of providing adequate competencies to their participants. It is worth noting that attending courses, as well as self-study, are a key aspect of QPIP educational success, but cannot be considered sufficient to acquire all the practical competencies for fulfilling certification requirements. In general terms, a QPIP is expected to have at least three years of professional experience as a complement to their theoretical education.

The document consists of four sections:

1. Schedule 1: Search Skills Syllabus – this section identifies knowledge requirements, practical skills and professional tools relevant for conducting patent searches, patent analyses and identifying relevant and non-relevant documents;
2. Schedule 2: Patent Law and Analysis Skills Syllabus – this section defines a range of topics and skills about patent law, patentability, claim interpretation and main procedures for patent application and patent invalidation;
3. Suggestions and recommendations for practising – examples of activities that QPIP applicants should master beyond gaining theoretical competencies;
4. A reading list with recommended publications

Sections 1 to 3 were derived by combining the recommendations and comments of a large group of people involved in the QPIP coordinators team, the Training and Education Working Group of CEPIUG and others. Beyond listing knowledge requirements and practical skills that a QPIP is supposed to master, Schedules 1 and 2 describe the competencies and skills that constitute the core learning objectives of QPIP training and education.

Schedules 1 and 2 also contain footnotes with detailed clarifications about how to interpret the knowledge requirements.

1. Schedule 1: Search Skills Syllabus

Searching Knowledge

S1.1. Background

S1.1.1. What is the difference between data, information and knowledge?

- Information retrieval basics (e.g. precision / recall dilemma)
- Structured data vs flat file (i.e. relational databases vs using internet search engines)
- Command based interfaces vs forms
- Named field searching vs mere keyword input
- Boolean logic and proximity operators
- Truncation and stemming

S1.2. Patent and Intellectual Property knowledge for searching

S1.2.1. What kind of industrial property rights exist?

- Different IP rights (copyright, designs, patents, trademarks, utility models, etc)
- Difference between application, publication and granted patent
- Knowledge on territorial coverage (national vs regional and PCT* applications and priority country)

S1.2.2. What is a patent¹?

- Patent life spans, opposition procedures, SPCs*, PTAs*
- Knowledge on patent law → see Schedule 2
- Different patent publication stages, their significance and their kind codes
- Annuity payments and patent life span, reinstatement, others

S1.2.3. Structure of a patent document (Patent document anatomy)?

- Knowledge of different parts of a patent document (front page, bibliographic

¹ Minimum required knowledge concerns the major authorities: EP, US, JP, CN, KR, and PCT. Additional understanding of national details may be warranted. It is not intended that the QPIP should have an in depth understanding of each and every country covered, rather an understanding of the overall framework and know where to find national details.

- data, INID codes*, title, abstract, description, claims, drawings)
 - o Patent families – different types
 - o Claim interpretation – commonly found words – comprising/consisting of etc
- see further schedule 2

S1.2.4. What are important dates in the life of patent?

- o Application, priority and publication dates, grace periods
- o Duration, expiry
- o How to determine whether a patent is “in force”
- o How dates relate to prior art, validity and other search types → see Schedule 2

S1.2.5. What is a legal status?

- o Sources of legal status data (national / federated registers* vs aggregated data (Inpadoc*))
- o Access to legal status data (national registers)
- o Interpretation of legal status codes*, event classes
- o Exceptions to statuses (esp. non-payment of the annual fee and non-entry into national / regional phase restitution)

S1.3. Databases and patent information resources

S1.3.1. What sort of patent data exists?

- o Publicly accessible data (Espacenet*, Google Patents*, others)
- o Knowledge on bibliographic, abstract, full-text and procedure related data (Espacenet*, Patentscope*, national office data, registers, others)
- o National register data
- o Data formats (PDF, XML, HTML, others)

S1.3.2. Patent databases²

- o Publicly available patent data (national, regional offices, registers)
- o Commercial databases³
- o Database documentation
- o Database pricing structures
- o Database structures (fields, operators, proximity, others)
- o Database/Host command language(s)

S1.4. Searching skills

² It is not expected of a QPIP candidate to be an expert in the syntax of all search environments, but rather understand the basic structure, data coverage and advantages/disadvantages of different systems.

³ It is recommended to have a thorough knowledge of at least one of the major commercial provider and being able to work with at least two.

S1.4.1. What is command language?

- How to enter commands
- How to access databases
- How to find information on the structure of the database
- Search history: documentation of search steps
- Knowledge of available display commands and their respective formats
- Searching numerical properties of entities (length, weight, conductivity, etc)
- Fielded searching: how to search fields (field=, /field, others)
- Dividing a search into a multitude of search steps
- Combining / re-using earlier search statements
- Knowledge of miscellaneous commands (Expand, Select, Analyse, others)
- Meaningfully combine data (e.g. dates and kind codes)

S1.4.2. How to prepare a patent search?

- Resources for technical background (e.g. Wikipedia etc.)
- Linguistic resources (dictionaries, translation services. PatentScope*)
- Where to find database documentation e.g. database factsheets
- Database provider's information resources (database description, guide to commands, best practice examples)

S1.4.3. How to find valid keywords?

- Knowledge of dictionaries and foreign language interfaces (e.g. PatentScope, Google Translate, others)
- Using a database's keyword highlighting functionality to help evaluate results
- Extracting meaningful search words from a search request
- Knowledge on how to choose from scanning exemplary hits (rough first hit set)
- Use of citing and cited patents
- Combining keywords into concepts

S1.4.4. What to consider when faced with a Name search?

- Using the Expand command for expanding on a company name root
- Using the corporate tree mechanism in patent databases
- Where to find information on Applicants (e.g. corporate websites)
- Company structures and affiliations
- Where to find ownership information in patent legal status

S1.5. Classification and specialist searching

S1.5.1. What is patent classification?

- IPC* based classification (CPC*, DEKla*, FI*)
- Other public non-IPC based classification (F-terms*, USClass*)
- Commercial non-IPC based classification (Derwent Class* and Manual Code*)
- Basic knowledge of classification for other IP rights (Nice*, Locarno*, Vienna*, etc.)

S1.5.2. How do you find the right classification?

- WIPO*, EPO*, GPTO*, USPTO* and JPO* office classification sites
- Availability of different search facilities (e.g. WIPO search in class definition text vs EPO search in limited number of patent documents and statistical display)
- Use of classification thesauri in patent databases
- Using analysis keyword search results for finding classification

S1.5.3. How do you find chemical data⁴?

- CAS registry number (finding numbers through Registry, internet)
- Structure searching (when it is suitable and when not)
- Using roles in relation to chemical entities
- Linking of chemical aspects to the chemical entity
- Chemical nomenclature and finding synonyms/common words
- Chemical name searching/controlled terms in Patbase, Derwent, Chemical Abstracts
- Generics vs specific compounds in chemistry
- Polymer searching in CAS, WPI etc
- Sequence searching in different databases and how to conduct them

S1.5.4. How do you find biological data⁵?

- Sequence searching in different databases and how to conduct them
- Nucleic acid and protein searches within sequence databases (e.g., Registry, USGENE, GeneSeq, GeneSeq FASTAlert, GQ-Pat)
- Sequence search strategies, when to use which algorithm (e.g. Motif, subsequence, similarity)
- Information on terminology, taxonomy, genome, mapping, protein structure and domains
- Antibody numbering: IMGT, Eu and Kabat

S1.5.4. What is a citation search?

⁴ Specialist knowledge only required within the QPIP candidate's own technical field

⁵ Specialist knowledge required within own technical field as 4

- What a citation in a patent document means
- Difference between examiner and applicant citations
- Difference between forward and backward citations
- How to search for citations in databases
- Citation categories (e.g. "X", "Y" and "A" located in EPO / WIPO search reports)

Search methodology in practice

S1.6. Prior art searching

S1.6.1. What to consider when faced with a state of the art search?

- Combining keywords into concepts
- Knowledge on keyword and classification search and the combination of both
- Knowledge on exactitude vs completeness of search result (precision vs recall)
- Report writing: Identifying relevant parts of patents/literature to cite to client

S1.7. Validity/opposition searching

S1.7.1. What to consider when faced with an opposition search?

- Knowledge on priority dates / grace periods to allow suitable time frame to be searched
- Which part of document should be searched
- Use of citation searches
- Claim interpretation ((in-) dependent, preamble, characterizing part)
- Subject matter eligible for prior art, obviousness
- Non-patent literature sources
- Report writing: Identifying relevant parts of patents/literature to cite to client

S1.8. Patent infringement risk searching

S1.8.1. What to consider when faced with a patent infringement risk search?

- Identifying intended markets for scope of search – limiting to countries of interest and regional counterparts
- Translation of important features into a search strategy
- How to determine a potentially infringed patent by a product
- Extracting important features from search request / product description for searching
- Determining time scale for searching potentially 'in force' patents → see Schedule 2
- Knowledge on identifying product features in claim language
- Searching/evaluating claims to assess relevancy

- Determining the status of a patent to determine whether it is still in force or pending patents → see Schedule 2
- Report writing: neutral language and words to avoid when reporting potentially threatening patents (e.g. words that should be avoided including “valid” “infringe” etc)

S1.9. Patent landscaping and statistics

S1.9.1. What to consider when faced with a landscape search?

- Understand the purpose of the request: what is the real question of your customer?
- Basic knowledge of statistics
- Knowledge of publicly available data (patent offices, PatStat*) / commercial offerings
- In-depth knowledge of database structure, data fields and operators
- Knowledge on how to check assignee data for company cross-ownerships / acquisition
- Meaningfully combine data (e.g. dates and kind codes)
- Deep understanding of Recall and Precision and how this balance is linked to the purpose of the project
- Family structures
- Patent ownership
- Citations: types, networks
- Automatic legal status estimation (on family level)
- Supervised and unsupervised clustering
- White spot analysis (feature matrix)
- Value indicators
- Visualization
- Reporting: an answer to the “real” question

S1.10. Post processing results and preparing reports

S1.10.1. How to post process your results?

- Downloading search results
- Data formats (e.g. plain text, csv, XML, PDF, others)
- How to integrate your search result into a word processing or spreadsheet program
- How (and how not) to formulate your findings / conclusions
- Report writing: what not to write in your search report
- Cleaning data; benefits and when this should be done (for landscaping)

S1.10.2. How do you document your work?

- How to save your search steps for future reference and / or re-use
- Knowledge about the steps in your preparation, search and client communication to document for future reference
- Identifying important parts of your search to check and update when re-using a search at a later point in time

2. Schedule 2: Patent Law and Analysis Skills Syllabus

Legal knowledge

S2.1. Document types ([link to practical skill](#))

S2.1.1. What kind of a document is this?

- Difference between patent, utility model, other publications
- Patent publication types (for example, what does A1, B9 mean?)
- Regional specifics on publication of patent docs: when, where, etc.
- Filing, prosecution and granting procedures

S2.2. Territorial scope of the patent document ([link](#))

S2.2.1. For which countries could this document be important?

- Concept of patent family
- Relevance of equivalents (e.g. application is less relevant when there is a granted patent)⁶
- Different patent organisations, in which phase they may be encountered and their coverage: PCT, EPC, Eurasia, ARIPO, OAPI, Unitary patent

S2.3. Patent duration ([link](#))

S2.3.1. When does this patent expire?

- Filing date and filing requirements
- Patent lifecycle regulations
- Life time of patents and utility models
- Difference between application and grant
- Annuity fee payments and registration thereof
- National registers
- Patent life extension possibilities (SPC, PTA)
- Abandonment notifications and repair procedures (EPC Art. 121 and 122)

⁶ Understand when preferably to look for broadest scope, correction documents, or granted patents amongst corresponding family members.

- Invalidation procedures after grant (opposition, re-examination, etc)

S2.4. Claim interpretation [\(link\)](#)

S2.4.1. What kind of claims does the patent have?

- Difference between product and process claims
- Different claim types (Jepson, product-by-process, medical use)
- Specific claim terms – definitions ('for', 'preferably')
- Scope of specific types of claims (product-by-process, medical use)

S2.5. Patentability [\(link\)](#)

S2.5.1. Determine inventive features⁷

- Novelty requirements and grace periods
- Definition of prior art (e.g. Art. 52 and 54 EPC, 35 USC §102)
- When documents are public documents
- If documents (e.g. from internet) may be used as prior art
- How prior art docs should be interpreted
- Regional differences in combining documents and potential pitfalls

S2.6. Invalidation [\(link\)](#)

S2.6.1. Setting up a claim chart

S2.6.2. Interpretation of claims

- Influence of specification on claim interpretation
- Interpretation based on Dictionary/heavy presumption

S2.6.3. What documents to choose?

- “submarine” patent applications with earlier priority date but later publication, what prior art may be used and under what terms (Art. 54 3 EPC)

S2.6.4. If I want to invalidate this claim which cut-off date do I need to use in my search?

⁷ The candidate is *not* expected to state whether a product/process is novel or inventive.

- Determination of effective date (e.g. divisional, continuation application (CON), Continuation-in-part application (C-i-P))
- Priority (Art. 4C Paris Convention, Art. 87 EPC)
- Grace periods
- Novelty requirements

S2.6.5. How can this patent be invalidated? [\(link\)](#)

- Invalidation proceedings: opposition, re-examination, etc., national court invalidation actions
- Formal requirements for these procedures and time limits
- Grounds for invalidation (e.g. grounds of opposition)

S2.7. Patent Infringement & Legal Status [\(link\)](#)

- Legal actions on infringement⁸
- What documents to select, only patents. Also need to consider "submarine" patents (those that are only published when granted)
- Legal status – how to decide whether it is still in force/pending⁹
- Time limits – depending on whether SPC could be in force¹⁰.

⁸ The candidate is *not* expected to make any judgment or state whether or not a patent claim is infringed. He/she should merely be able to read claims and understand their limitations.

⁹ The candidate should not make statements about invalidity.

¹⁰ The candidate is expected to understand the difference between the priority date(s) and the filing date.

3. Suggestions/recommendations for practicing

Document types [back](#)

a) Knowledge of places for finding information on different document kinds

When a Searcher notices the database output and the codes on the document, it is understood what is meant by the different document codes. S/he knows the places where this information can be found (hosts' website or on specific websites with description of kind codes)

b) Know differences between A and B documents

Having retrieved several records from a search, the Searcher can interpret what the codes mean, and realise there is a difference between the countries.

c) Global knowledge of the US, WO and EPO patenting procedure

When a filing takes place, the Searcher knows the global procedures and durations for the main patent issuing authorities, such as USPTO, WIPO, EPO, CNIPA, KIPO, JPO.

d) Knowing the difference between a patent and a utility model

Most countries have different systems in place and in practice the Searcher needs to know the differences.

e) Knowing the Unitary patent system

When a request comes up about the Unitary Patent System, the Searcher can find related information and report on it.

Patent Organizations [back](#)

a) Knowing the existence and coverage of different patent issuing authorities like WIPO, EPO and USPTO

When a search has to be performed, the Searcher knows the publication types of these organisations and is familiar with their procedures. For making decisions on where to search, and finding relevant information, it is possible to decide whether or not to include the smaller organisations mentioned below:

- www.uspto.gov www.epo.org www.wipo.int

Knowing the general country coverage of:

1. ARIPO African Regional Intellectual Property Organization
www.aripo.org
2. OAPI Organisation Africaine de la Propriété Intellectuelle
www.oapi.int
3. GCC Gulf Cooperation Council
<http://www.gccpo.org/DefaultEn.aspx>

Knowing the coverage of the organisations above and know how to find their websites.

b) Knowing patent family structure

- **Extended family**
- **Simple family**

Reviewing a search output, the Searcher knows the different family types (including their meaning) and which databases use which family definition. The impact of the family structure on the search results can be easily explained and corrected if necessary.

c) Knowing meaning of patent status information and how to retrieve (grants, fee payment and coverage).

The Searcher is aware when and how patent status information needs to be included.

Patent terms [back](#)

a) Knowing the meaning of priority date, filing date

Based on the priority date and the filing date a Searcher can calculate the expected expiration date
Basic knowledge can be found in:

Further detail about expiration dates:

b) Know the possibilities for extensions → SPC, PTE

Calculation of the Patent term Extension or Supplementary protection can be done by a Searcher by knowing the rules for this, as well as the cases where it is possible.

c) Knowing the term and procedures for invalidation, opposition

By getting a request for invalidation or opposition the Searcher is able to start immediately with the

correct process, by knowing the type of literature that is relevant and is aware of the procedures including the time limits

d) Know where and how to find the National registers (for example: fee payment info)

For retrieving legal status information for national patents the Searcher knows how to retrieve this information and what it means for a specific patent.

e) Knowing the patent terms for different countries

The expiration date for a patent in a specific country can be calculated based on the different patent terms for each country (see also a)

Claims [back](#)

a) Knowing difference between claim types (process, product , Markush, etc.)

When a patent claim is analysed a Searcher can immediately recognise the claim type.

b) Knowing the meaning of novelty and inventiveness

Can easily define what is meant by novelty and inventiveness, and a Searcher knows what type of information can be used to attack novelty and inventive step.

c) Interpretation of the scope of claims

A Searcher is, after reading a claim (in view of the description), able to define how broad a claim needs to be interpreted (also doctrine of equivalence)

d) Claim terminology and difference between countries

A Searcher can easily find synonyms for words used in claims, as well as, translated keywords into different languages and know how to generate these keywords

Patent Infringement Risk Search [back](#)

a) Know when there is an infringement (claim interpretation / legal aspect, fee payment)

A Searcher can recognise, based on the available information, whether or not a product may potentially infringe a patent right and is able to retrieve the necessary information.

b) Possibilities for actions in case of infringement

A Searcher can, based on the results found during the search, recommend or perform, under supervision of a patent attorney, further steps such as searching for and reporting on patent legal status.

Patentability [back](#)

a) Requirements for patentability

Know that for patentability the application has to fulfill three requirements (novel, inventive and industrially applicable)

b) Knowing what documents are relevant in view of patentability

To perform a search the Searcher is aware of which documents may be relevant towards the novelty and inventive step and knows how to retrieve them.

c) Knowing what is meant by Prior art and how to read and use it

The meaning of the legal concept of “prior art” and the searcher can find, use and interpret it.

d) Knowing the difference between countries

As countries have different definition of what can be patented, the Searcher is aware of the difference and knows where to find the details of national patent laws

e) Knowing the difference between Novelty and Inventive Step

Can easily define what is meant by novelty and inventiveness, and a Searcher knows what type of information can be used to attack novelty and inventive step.

Oppositions [back](#)

a) Knowing the terms for opposition

For starting an opposition search, it is known what the opposition term is, and when results have to be delivered.

b) Difference between procedures in the different countries

As countries have different terms for oppositions, the Searcher is aware of the difference and knows where to find the details of national patent laws

c) Example studies of case law related to Opposition

To understand the difference between prior art that can be used for opposition it is important to have sufficient knowledge of the national patent laws related to opposition

Invalidation [back](#)

a) Know what can be relevant prior art

Before a search is started a Searcher is aware of the information (publication) that can be used during an invalidation

b) Know how to use documents for invalidation

And is aware how this information fits into the invalidation process.

c) Know procedures of invalidation (EU, US, ...)

Different jurisdictions have different invalidation procedures. The Searcher can easily indicate which documents can be used for a procedure in which country

d) Know different re-examination procedures (inter-party ex-party, post-grant review, etc. (US-only))

In order to be able to find correct documents and give advice knowledge of different US invalidation procedures is required

e) Knowing legal status and extensions

Each country has different rules regarding legal status and extensions. The Searcher is aware of the different possibilities for the main countries and knows where to find information for less relevant countries.

4. Suggested Reading List

Searching Knowledge

S1.1. Background

Efficient situation specific and adaptive search strategies: Training material for new patent searchers

Ricardo Oltra-Garcia

World Patent Information, Volume 34, Issue 1, March 2012, Pages 54–61

<http://www.sciencedirect.com/science/article/pii/S0172219011001852>

S1.2. Patent and Intellectual Property knowledge for searching

Inventorship and Authorship

Cold Spring Harb Perspect Med November 2015;5:a020859

Antoinette F. Konski and Linda X. Wu

<http://perspectivesinmedicine.cshlp.org/content/5/11/a020859.short?rss=1>

“Black sheep” in the patent family

Edlyn S. Simmons

World Patent Information, Volume 31, Issue 1, March 2009, Pages 11–18

<http://www.sciencedirect.com/science/article/pii/S017221900800104X>

The text, the full text and nothing but the text: Part 1 – Standards for creating textual information in patent documents and general search implications

Stephen Adams

World Patent Information, Volume 32, Issue 1, March 2010, Pages 22–29

<http://www.sciencedirect.com/science/article/pii/S0172219009000519>

The text, the full text and nothing but the text: Part 2 – The main specification, searching challenges and survey of availability

Stephen Adams

World Patent Information, Volume 32, Issue 2, June 2010, Pages 120–128

<http://www.sciencedirect.com/science/article/pii/S0172219009000520>

Lost in translation? – A review of the post-grant requirements for translation of patent specifications in Europe

World Patent Information 44:34-45 · March 2016

Stephen Adams

<http://www.sciencedirect.com/science/article/pii/S0172219016000041>

S1.3. Databases and patent information resources

Free sources for patent searching: A review

Business Information Review December 2014 vol. 31 no. 4 216-225

Margaret M Rainey

<http://bir.sagepub.com/content/31/4/216.abstract>

Espacenet, Patentscope and Depatisnet: A comparison approach

Björn Jürgens, , Victor Herrero-Solana,

World Patent Information, Volume 42, September 2015, Pages 4–12

<http://www.sciencedirect.com/science/article/pii/S0172219015000460>

Full-text patent searching on free websites - Tools, tips and tricks

Business Information Review December 2014 vol. 31 no. 4 226-236

Maddy Marley

<http://bir.sagepub.com/content/31/4/226.abstract>

Study and comparison of the unique selling propositions (USPs) of free-to-use multinational patent search systems

Björn Jürgens, Nigel Clarke

World Patent Information, Volume 52, March 2018, Pages 9-16

<https://www.sciencedirect.com/science/article/abs/pii/S0172219017300856>

S1.4. Searching skills

Searching? Or actually trying to find something? – The comforts of searching versus the challenges of finding

Evert Nijhof

World Patent Information, Volume 33, Issue 4, December 2011, Pages 360–363

<http://www.sciencedirect.com/science/article/pii/S0172219011001013>

Subject analysis and search strategies – Has the searcher become the bottleneck in the search process?

Evert Nijhof

World Patent Information, Volume 29, Issue 1, March 2007, Pages 20–25

<http://www.sciencedirect.com/science/article/pii/S0172219006000962>

How to search the indescribable - Search concepts for products requiring parametric and/or product-by-process definitions

Bernd GoersEveline LançonHeide Götz

World Patent Information, Volume 54, Supplement, September 2018, Pages S51-S58

<https://www.sciencedirect.com/science/article/pii/S0172219016300655>

S1.5. Classification & Specialist Searching

It takes all kinds to make a world - Some thoughts on the use of classification in patent searching

Bernd Wolter

World Patent Information, Volume 34, Issue 1, March 2012, Pages 8-18

<http://www.sciencedirect.com/science/article/pii/S0172219011001402>

Automated Patent Categorization and Guided Patent Search using IPC as Inspired by MeSH and PubMed

J Biomed Semantics. 2013; 4(Suppl 1): S3.

Daniel Eisinger, George Tsatsaronis, Markus Bundschuh, Ulrich Wieneke, and Michael Schroeder

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3632996/>

Searching in Cooperative Patent Classification: Comparison between keyword and concept-based search

Advanced Engineering Informatics, Volume 27, Issue 3, August 2013, Pages 335–345

Tiziano Montecchia, Davide Russo, Ying Liub

<http://www.sciencedirect.com/science/article/pii/S1474034613000219>

Find the most adequate FI and F-terms

Eigo Kashimoto

World Patent Information, Volume 44, March 2016, Pages 24–33

<http://www.sciencedirect.com/science/article/pii/S0172219016000065?np=y>

An A to X of patent citations for searching

Jane List

World Patent Information, Volume 32, Issue 4, December 2010, Pages 306–312

<http://www.sciencedirect.com/science/article/pii/S0172219010000050>

Prior art searching in the preparation of pharmaceutical patent applications. Review Article

Edlyn S. Simmons

Drug Discovery Today, Volume 3, Issue 2, February 1998, Pages 52-60

<http://www.sciencedirect.com/science/article/pii/S1359644697011458>

Full-text prior art and chemical structure searching in e-journals and on the internet? A patent information professional's perspective

Maik Annies

World Patent Information, Volume 31, Issue 4, December 2009, Pages 278-284

<http://www.sciencedirect.com/science/article/pii/S0172219009000441>

Markush structure searching by information professionals in the chemical industry – Our views and expectations

Peter Geyer

World Patent Information Volume 35, Issue 3, September 2013, Pages 178–182

<http://www.sciencedirect.com/science/article/pii/S0172219013000719?np=y>

Markush structure searching over the years

Edlyn S. Simmons

World Patent Information Volume 25, Issue 3, September 2003, Pages 195–202

<http://www.sciencedirect.com/science/article/pii/S0172219003000735>

A guide to efficient keyword, sequence and classification search strategies for biopharmaceutical drug-centric patent landscape searches - A human recombinant insulin patent landscape case study

Dietmar Dirnberger

World Patent Information, Volume 33, Issue 2, June 2011, Pages 128-143

<http://www.sciencedirect.com/science/article/pii/S0172219010001286>

Patent searches for genetic sequences: how to retrieve relevant records from patented sequence databases.

Nat Biotechnol. 2002 Dec;20(12):1269-71.

Dufresne G, Takács L, Heus HC, Codani JJ, Duval M.

<https://www.ncbi.nlm.nih.gov/pubmed/12454675>

Patentability searching for biomaterial and related polymers

Cécile Denis, Razik A. Menidjel

World Patent Information, Volume 34, Issue 4, December 2012, Pages 284-291

<http://www.sciencedirect.com/science/article/pii/S0172219012001287>

Search methodology in practice

S1.6. Prior art searching

Survey of PCT search reports and the importance of the internet as a source of non-patent literature.

Stephen Adams

World Patent Information 34(2), 112-123 (2012)

<http://www.sciencedirect.com/science/article/pii/S0172219012000282?np=y>

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S1.8. Patent infringement risk searching

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Tom Wolff

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S1.9. Patent landscaping and statistics

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Tony Trippe

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Improving transparency and reproducibility of patent landscapes: the Reporting Items for Patent Landscapes (RIPL) statement and other considerations

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<http://www.sciencedirect.com/science/article/pii/S0172219010000864>

Patent Landscape Reports by Other Organizations

World Intellectual Property Organization (website resource)

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S1.10. Post processing results and preparing reports

Improving transparency and reproducibility of patent landscapes: the Reporting Items for Patent Landscapes (RIPL) statement and other considerations

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Legal knowledge

S2.1. Document types

Information Sources in Patents (Guides to Information Sources)

Book. Author: Stephen Adams

Publisher: Walter de Gruyter & Co; 4th edition (21 September 2020)

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S2.2. Territorial scope of the patent document

Beyond patent families

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S2.3. Patent duration

The face of the patent is not the “Whole Story”: determining effective life of a pharmaceutical patent in the United States

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S2.4. Claim interpretation

None

S2.5. Patentability

The America Invents Act implementation

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S2.6. Invalidation

None

S2.7 Patent Infringement & Legal Status

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List as of December 2020

Last links checking – December 8, 2020