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Patent information – driving force of innovation

Comprehensive and current patent information is indispensable in order to avoid costly duplicate research, to protect proprietary know-how, to secure competitive advantages, and to ensure a company’s innovative power.

According to an estimation from the European Patent Office, European enterprises lose 20 billion Euro per year due to “duplicate” inventions – inventions which have already been published and patented. Patent litigations are another risk factor for innovative companies. In order to protect the high investment costs required by innovations, reliable information is needed for each step of the entire process of invention – from the idea to the patent to the exploitation.

As a means of monitoring innovation, the state of the art, international markets, and the competitors’ activities, patent information has no equal. Therefore, patent information comprising technical, legal, and business aspects has become an indispensable tool for business planning. Last but not least, it can protect your valuable inventions.

Legal aspects
Information on legal aspects includes, for example, the patent application and publication dates, the year in which a patent was granted, inventor and applicant names, priority information, patent family information, legal status data, etc.

Systematic statistical patent analysis
Systematic patent analysis is another useful feature of patent databases. It can be used for important strategic tasks within a company – for competitor analysis, or for monitoring the patenting behavior of companies in a specific manufacturing or technology field. Moreover, systematic patent analysis can be used for early recognition of technological trends and is particularly useful for marketing experts, product planners, business planners, and managers.

Technology information (prior art)
More than 80% of the scientific and technical information contained in patent literature is not published anywhere else. In most patent databases the invention is described in the form of abstracts, descriptions, claims, or classification data such as the International Patent Classification (IPC). Technical patent drawings and full-text are available in some of the patent databases.

All of these facts make patent databases an indispensable source of information, e.g., for keeping abreast of the state of the art and for surveying competitive activity. Patent information may even uncover a technology that would be especially useful to your industry, one that could be further developed, and perhaps be licensed, saving time and development costs.

Value-added patent databases
Patent documents often reveal just as much information about an innovation as is needed to successfully apply for a patent. The original language of the document may also be an obstacle to accessing the content, especially with patent documents from Asia. To obtain comprehensive search results, human experts edit the content of patent documents, e.g., they write new meaningful titles and abstracts in English language, add specific indexing terms and classification notes, and standardize bibliographic data. If value is added in this way to the original documents during the database production, the databases are called “value-added” databases. The most significant and renowned value-added patent databases are the
For a long time, value-added patent databases had been the only sources of worldwide patent publications. As first-level patent databases — bibliographic and full-text databases from the major patent authorities in Europe, the USA, and Asia — have now become available directly with the patent offices, the question arises whether value-added patent databases are still needed. A case study comparing the search results from value-added and first-level patent databases has shown that value-added patent databases are of utmost importance and information from first-level patent databases on its own is not sufficient to support business-critical decisions (see below).

**Value-added and first-level patent databases on STN complement one another**

Conclusions from a case study comparing the search results from value-added and first-level patent databases for the drug Pantoprazole:

- All key patents of Pantoprazole were found in value-added patent databases, simply because in these databases Pantoprazole is searchable as a definite chemical structure. In contrast, patent full-text databases have to be searched with chemical names which are very inconsistent.

- The search results from value-added patent databases were highly relevant with less than 1% false drops. The records of CAS and Clarivate Analytics’ Derwent databases are also very useful for efficient relevance checking because the enhanced text information assists in getting a better understanding of the actual invention.

- CAS and Clarivate Analytics make enormous efforts to cover patent publications from Asia and smaller patent authorities which are difficult to retrieve from first-level data sources.

- The outstanding feature of the first-level patent databases INPADOCDB and INPAFAMDB is the unrivalled patent authority coverage.

- Patent full-text databases are usually very timely resources which provide fast access to all details of the patent claims and the description that are not completely available in value-added databases.

The essence of this case study is that for all patent searches with high commercial relevance it is essential to search all value-added patent databases and complement the results with data from first-level patent databases. STN databases are standardized and allow for a very focused retrieval.
STN’s unparalleled offer

STN International provides the world’s largest and most important patent and research databases on a neutral platform. About 120 databases with more than 1.5 billion records are available. STN databases are entirely transparent as regards their time and subject coverage and the document types considered. Many of these databases have been enhanced with additional value-added information for more precise and concise search results.

STN is the only information service offering databases from the three important database producers Clarivate Analytics, Chemical Abstracts Service (CAS) and European Patent Office (EPO) on a single platform:

• Derwent World Patents Index (DWPI), Derwent Chemistry Resource (DCR), Derwent Markush Resource (DWPIM)
• CAplus™, MARPAT®, REGISTRY™
• INPADOCDB/INPAFAMDB.

Patenting gene and protein sequences has become increasingly important with pharma and biotech companies involved in research. Therefore, STN offers the largest publicly available collection of biosequence data from patent literature and journals published all over the world.

STN continuously makes sure that quality standards are met. Newly loaded data are regularly checked and the entire data pool is checked for accuracy. Detected errors are corrected in close collaboration with the database producers.

At STN® all databases are adapted to the standardized STN environment. They all have a homogeneous design and can be searched using the same search fields and proximity operators. Text, structure, and numerical data are stored in homogeneous fields. This creates considerable synergy effects; for example, by allowing for multi-file searches, i.e., searches across several databases without the need to re-formulate the search strategy, and with the possibility to remove duplicates. Also very important in this context is the standardization of certain formats such as patent numbers and patent classifications.

The information is made accessible by powerful software tools. STN’s retrieval system is entirely transparent and allows for text searches, factual searches, and chemical structure and biosequence searches. Thus, highly precise search results can be obtained. Using STN’s analysis functionality enables you to discover new research and patenting trends at an early stage, to identify important market players, or to find new fields of application for existing technologies.

STN places great emphasis on optimum customer support:

• expert helpdesk
• detailed documentation on the databases and the retrieval language
• workshops and e-seminars on different topics
• monthly newsletter

STN provides secure internet access and does not analyze or store its customers’ search strategies.

STN is provided by reliable institutions with broad expertise and long-standing experience in the information business: Since 1984, it has been jointly operated by FIZ Karlsruhe/Germany and Chemical Abstracts Service (CAS)/USA. Customer support in Japan is provided by JAICI (Japan Association for International Chemical Information).
Derwent World Patents Index (DWPI)

The Derwent World Patents Index (files WPINDEX/WPIDS/WPIX) is a comprehensive value-added database of worldwide patents covering all areas of technology. The intellectual value of DWPI is the result of a thorough editorial process of classification, abstracting, and indexing. Original titles and abstracts are rewritten to reveal the actual invention and highlight the main uses and advantages of the technology.

Content and coverage
Patent records in DWPI are compiled from the patents and published applications of 52 global issuing authorities and two literature sources. The file contains about 39 million documents with more than 29 million images and 2 million chemical structures back to 1963 and is updated every 2 days.

- high-quality bibliographic information which summarizes all publication details for a particular invention
- enhanced Derwent titles and patent-focused abstracts
- DWPI-specific coding and deep indexing for chemical patents
- full coverage of major patent classifications, including IPC, CPC, F-terms and FI-terms
- original patent titles, abstracts, and main claim text

The Derwent value-add for chemical patents
DWPI Chemistry Resource (DCR) provides structure-based access to specific chemical compounds back to 1999 for all users of DWPI.

The Derwent value-add for engineering patents
Manual Codes are used for engineering patents to classify the novel technical aspects of an invention as well as its commercial application, back to 1980.

Subscribers can also benefit from
- fragmentation coding providing access to specific and Markush structures back to 1963
- polymer indexing available for all polymer-related patents back to 1966
- Manual Codes used in the chemical, pharmaceutical and agrochemical area to classify significant parts of the invention and its commercial application, back to 1963

Your benefit
- more comprehensive retrieval and easier relevance checking from value-added text data
- more reliable technology searching with DWPI deep indexing
- great variety of search options for more focused searches
- efficient patent analysis from highly standardized bibliographic data
Negative electrode for rechargeable lithium battery comprises negative active material layer comprising interpenetrating network formed by crosslinking polymer having hydroxyl or amine group and polymer having carboxylic acid group.

A negative electrode (112) comprises a negative active material layer on a current collector and comprising an interpenetrating network formed by crosslinking a polymer having a hydroxyl or amine group and a polymer having a carboxylic acid group.
First-ever unified Markush solution delivers access to generic chemical structures

As the number of chemical structures disclosed in patents rapidly increases, it is imperative that IP professionals have the right tools for searching this information efficiently and reliably. STN introduced on the new STN platform the first-ever unified Markush structure search solution with MARPAT® from CAS and the Derwent Markush Resource (DWPIM) from Clarivate Analytics.

For the first time, patent information professionals are able to conduct all of their chemical structure and Markush searches on a single platform using the most important chemical structure databases including CAS Registry, Reaxysfile and Derwent Chemical Resource.

Easy Markush searching and evaluation:
• easy-to-use structure drawing editor
• straightforward structure searching in multiple databases
• efficient evaluation by meaningful assembled hit structures

The Derwent Markush Resource database
The inclusion of chemical Markush structures in patent searches is decisive for assessing the patentability of a substance or substance class. The Derwent Markush Resource database (DWPIM) is fully integrated in the STN search environment for chemical (structure) databases with an easy-to-use modern interface. Derwent Markush Resource is a comprehensive value added database covering generic chemical structures of various substance classes. The records in DWPIM are structure based, i.e., one record contains a single Markush structure with all variations linked to a corresponding record in DWPI via a Markush compound number. This design ensures that DWPIM is seamlessly integrated with other related Clarivate Analytics databases (DWPI, DCR) on STN.

Chemical compounds can be disclosed in patents in two ways: as specific structures and as structures with generic descriptions. These so-called Markush structures may represent hundreds or thousands of individual chemical compounds. Markush structures are widely used in chemical and pharmaceutical patents to protect a class of compounds within a single invention. Therefore, the inclusion of Markush patent searching is decisive for assessing the patentability of a substance or substance class. IP professionals will need this to explore freedom to operate at various stages of the development and also to assess the value of a patent portfolio in the chemical and pharmaceutical fields. Pharmaceutical companies in drug discovery use Markush patents for a strong protection of potential drugs. While Markush structures often make up the claims of a patent, specific compounds represent the preferred aspect of the invention.

Content and Coverage
Patent countries and data sources
• Markush indexing for more than 900,000 DWPI records
• 33 patent-issuing authorities
• US, EP, and WO coverage from 1978 onwards
• DWPI major authorities from 1987 onwards
• Complete INPI backfile (1961-1998)
Substance classes
- more than 2.2 million Markush structures
- major classes include organic and organometallic compounds.
- inorganic compounds, polymers, peptides, and partially defined structures

Sophisticated Search and Retrieval Empower Search Precision
- consistent and comfortable Markush search capabilities due to preserved STN structure search conventions
- hierarchical Markush search concept supported by established attributes
- 18 new Derwent superatoms enable more refined generic structure searches
- full STN support of 22 distinct generic nodes used for Markush indexing to encompass key chemical groups and elements
- distinct node attributes (e.g., element counts, monocyclic/polycyclic)

Flexible Display Options
- three distinct display formats for efficient and comprehensive hit structure evaluation (full, brief, assembled)
- hit structure highlighting helps to establish relevance and speeds up results review
Chemical Abstracts Plus (CAplusSM) and CAS REGISTRYSM

Chemical Abstracts Plus (CAplusSM) is the most current and comprehensive bibliographic database of chemical information available from Chemical Abstracts Service (CAS). CAplus is directly linked to its companion file CAS REGISTRYSM which is the broadest collection of chemical substance information worldwide. The CAS databases CAplus and CAS REGISTRY offer intellectually analyzed content obtained from journal and patent literature.

Content and coverage of CAplus
CAplus covers patent and journal article references from all areas of chemistry, biomedical sciences, engineering, materials science and agricultural science. Coverage goes back to the early 1800s. The file is updated daily and now contains:

- over 14.1 million records for patent publications of 63 patent-issuing authorities
- more than 35.3 million records for articles from thousands of journals worldwide, technical disclosures, books, conference proceedings, dissertations, reviews, etc.
- patent references from 9 major patent authorities, available within 2 days of publication; records are fully indexed within less than 27 days from the date of publication
- full coverage of the International Patent Classification (IPC 8)
- value-added content including substance-specific indexing (CAS REGISTRY numbers) and controlled vocabulary for concept information.

Content and coverage of CAS REGISTRY
CAS REGISTRY is the world’s largest substance database covering substance information on all types of organic and inorganic substances, including polymers, alloys, coordination compounds, and mixtures. All substance records contain a unique CAS REGISTRY number (RN). Coverage starts in the early 1800s. The file is updated daily and contains:

- more than 150 million organic and inorganic substances and about 72 million sequences
- comprehensive substance information including chemical structures, trade names, systematic names, synonyms, and molecular formulae
- calculated and experimental property data.

Your benefit
- efficient and comprehensive retrieval of chemical substance information from patent and non-patent literature
- fast access to chemical patent information in English
- enhanced search results from thesaurus-supported subject searching
Title compds. [I; R1-R4 = H, alkyl, halo, OH, alkoxy, alkoxy carbonyl, CO2H, cyano; A, E = (substituted) alkylene; M = alkali metal, alkaline earth metal, ammonium] were prepared by oxidation of (II; variables as above) to give the exomethylenelactone followed by rearrangement in the presence of cyanide and alkali- or alkaline earth metal alcoholates or hydroxides. Thus, 3-methylenebicyclo[2.2.1]heptan-2-one and NaOAc.3H2O in CH2Cl2 were treated with 32% AcOOH in AcOH at -8 to -10 followed by stirring at -8 for 1 h to give 68.2% 4-methylene-3-oxabicyclo[3.2.1] octan-2-one. This was stirred with Et3N and KCN in MeCN at room temperature-55 to give 74.3% bicyclo[3.3.1]octane-2,4-dione.
PatentPak™ — Preserve your most powerful resource – time!

PatentPak™ is a robust patent workflow solution available in classic STN® to support retrieval and analysis of full-text patent information across organizational workflows. It is designed to radically reduce the time spent acquiring patents and pinpointing the relevant chemical substance information within.

**PatentPak™ is a robust patent workflow solution integrated with CAplus™.**

- rapidly track down the specific location of hard-to-find chemical information in patents with interactive links to key substances
- instantly and securely access patent PDFs from major patent offices
- conveniently share findings with other IP stakeholders – even if they don’t use STN
- find an equivalent patent in a familiar language with CAplus global patent family coverage.

PatentPak provides access to more than **10 million patents** to date, with more added daily from 31 patent offices, including:
- China
- France
- Germany
- Great Britain
- India
- Japan

**PatentPak on STN options:**

PatentPak provides a number of pathways to access the information you need.

- PatentPak PDF – More than 9 million original, clean PDFs from the PatentPak library
- PatentPak PDF+ – The patent PDF, plus a table containing the important chemistry within the patent
- PatentPak Interactive – An interactive version of the patent PDF that highlights the specific location where each indexed substance is discussed

PatentPak supports IP workflows within your organization. You can easily share transcripts, tables and reports, including PatentPak information, with other stakeholders in your organization – even if they don’t have access to STN. PatentPak links are active for 90 days from the date of creation.

**How will PatentPak help me?**

PatentPak will save you time and help increase IP workflow efficiency in your organization by:

- slashing the time it takes you to find substance information in lengthy patent documents
- allowing you to easily find equivalents to foreign language patents, reducing patent translation costs and delays
- providing you with a convenient source of patent PDFs for analysis
- eliminating the need to navigate to external sources to retrieve PDFs
Access PatentPak in a number of ways from CAPLUS patent records in STN Express® and STN® on the WebSM.

L1 ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2016 ACS on STN

### PatentPak PDF  PatentPak PDF+  PatentPak Interactive  Full Text

**AN** 2015:758868  CAPLUS  
**DN** 162:591100  
**ED** Entered STN: 05 May 2015  
**TI** Method of jetting ink  
**IN** Breton, Marcel Philippe; Belelie, Jennifer L.; Goredema, Adela; Smith, Paul F.  
**PA** Xerox Corporation, USA  
**CODEN** USXXAM  
**DT** Patent  
**LA** English  
**CC** 42-2 (Coatings, Inks, and Related Products)  
**Section cross-reference(s):** 74  
**FAN.CNT** 1  

### Patents

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### Patent Applications

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INPADOC databases on STN: INPADOCDB and INPAFAMDB

The INPADOC databases are highly valuable sources of worldwide patent information covering first-level patent data from all areas of technology. While both files contain the same data, the file-specific designs provide an optimized environment for any kind of search. The patent family database INPAFAMDB is ideal for prior art searching while the application-based INPADOCDB is the preferred database for searching and monitoring patent family and legal status information.

Content and coverage
The INPADOC databases on STN are created from the world’s largest collection of bibliographic and legal status data of the European Patent Office (EPO). They provide access patent information from 1782 to the present. The files are updated weekly and now contain

• about 90 million patent applications with about 108 million publications from more than 100 patent authorities, and grouped into more than 50 million international families
• substantial backfile data for major patent authorities back to 1836 (US), 1879 (DE), 1893 (GB) and 1944 (JP)
• accurate patent family information through FIZ Karlsruhe’s quality control and editorial corrections
• more than 250 million legal status events from 77 patent authorities
• extensive coverage of applicant titles and abstracts, mainly in English
• cited references for 35 patent offices
• comprehensive coverage of the International Patent Classification (IPC8) and the Cooperative Patent Classification (CPC), US and Japanese Classification for US- and JP-documents

Your benefit
The INPADOC databases offer precise retrieval and monitoring capabilities in combination with flexible display options. A thorough quality control is in place which checks every database update for bibliographic errors. Patent family related data are corrected in a fast and ongoing process.

• efficient analysis of patent families supported by flexible patent family displays and various bibliographic details
• focused and customizable alerts with weekly and monthly monitoring options (SDIs)
• simplified legal status searching with reliable legal status categories
• more comprehensive inventor and assignee searching with search options including standardizations and reassignments
• synergies with CAPLUS and DWPI in a multifile prior art search with INPAFAMDB
• thesaurus supported patent classification searching
• great variety of patent analysis options
A typical INPAFAMDB database record

AN 50555461 INPAFAMDB
PATENT FAMILY INFORMATION INPAFAMDB

1 Family Accession Number
2 International Patent Classification (IPC)
3 Cooperative Patent Classification (CPC)
4 US Patent Classification
5 Japanese Patent Classification
6 Application Abstract
7 Patent Family Summary Information
8 Cited References and Categories (CAT)
9 INPADOC Legal Status and Categories (LSC2)

A high-frequency treatment device is used in excising a lesion tissue from a normal tissue. The device includes a tubular body having a front end portion and a rear end portion; an operating handle having a...
**Quality assurance**

The compilation of the INPADOC data from more than 100 different patent authorities is a tremendous task performed by the European Patent Office. Database assurance processes at the EPO significantly contribute to the quality of the database. Nevertheless, FIZ Karlsruhe identifies areas where the quality of the database can be improved even further:

- All patent, priority, and application numbers are verified and compared with a standard when the database is updated. Thus, systematic errors can be found and corrected immediately. In addition, errors found intellectually, e.g. by customers, are corrected.

- Searching for legal status information is made easier and faster by additionally classifying the legal status into patent-relevant groups. Thus, you do not need detailed information on more than 4,000 different legal status codings at the different patent offices.

- Regularly updating the reference tables with descriptions of the codes used in patents (priority information, legal status) makes the documents more meaningful and better understandable. This helps information professionals to better evaluate the search result.

---

**Separate patent families are merged due to priority number corrections by FIZ Karlsruhe**

**Correction of AU-priority number of US20040247714:** AU2002-052212 $\Rightarrow$ AU2002-952212

STN created non-conventional patent families for Chinese dual filings for parallel filings of a patent and a utility model at the same day for the same “invention-creation”. Based on citation information links more than 330,000 non-conventional family links have been generated up to now (08/2016). FIZ Karlsruhe Editorial adds the utility model application number as a technical priority to the related CN A publication to establish the family relationship.

Example: Patent Family of CN dual filings in INPADOC on STN (CN A: Wang Jun, Movable folding stereoscopic parking lot)

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<th>Publication Information</th>
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The priority number in blue is a technical priority added to the CN A publication, thus bringing CN105201247 A and CN204754359 U into the same family.
INPAFAMDB for prior-art technology searching with Derwent World Patents Index

A multilanguage search example: patent search for “three-wheeled roller skates”

Use a multi-language query for the keyword search in WPINDEX and INPAFAMDB.

The TRANSFER command can be used for duplicate removal between WPINDEX and INPAFAMDB.

The INPAFAMDB search retrieves 33 additional inventions due to the excellent coverage of utility models from Asia.

The utility model provides a novel roller skate. Three movable wheels are arranged on the bottom of a shoe body, wherein two movable wheels are arranged in the left and right position of the back half part of the shoe bottom or in the left and right position of the front half part thereof, the other movable wheel is a universal wheel and is arranged in the middle position of the front half part or in the middle position of the back half part. When a person uses the roller skate, since a universal wheel is arranged on the body, the roller skate can rotate and slide flexibly, and the person can make highly difficult motions easily. The utility model has the advantages of simple structure, more flexible use and large market prospect.
Searching biosequence data from patents

Biosequence information is stored in highly specialized databases on STN. These databases contain polypeptide or nucleotide sequences as well as information about the source organism, gene descriptions, protein activities, regulation, and function notes.

**DGENE** (Derwent GENESEQ) covers peptide and nucleic acid sequences from the basic patent publications of the 47 authorities of the Derwent World Patents Index (DWPI). Coverage includes nucleotide sequences of 10 or more bases, all amino acid sequences of 4 or more residues, and nucleic acid probes and primers of any length. More than half of the 50 million sequence data that appear in DGENE are not available in any other sequence database.

Records contain a Derwent enhanced title from DWPI, a concise sequence description, an English abstract written especially for DGENE by a Clarivate Analytics (Scientific) expert, patent information, detailed indexing, a feature table, and sequence data.

**PCTGEN** contains information on nucleic acid and protein sequences submitted electronically to the World Intellectual Property Organization (WIPO) as a formal part of PCT patent applications from August 2001. Each record includes the sequence data as submitted by the patent applicant, and additional information such as molecule type and organism name as well as patent related data, e.g., application and publication dates. The file contains about 18 million biosequences. Sequence data are available within 24 hours of publication.

**USGENE** (The USPTO Genetic Sequence Database) covers all available peptide and nucleic acid sequences from the published applications and issued patents of the United States Patent and Trademark Office (USPTO) back to 1976. The USGENE database includes extensive bibliographic and text search options, including publication title, abstract, patent assignees at issue, full inventor names plus the complete set of publication, application and parent case WIPO/PCT numbers and dates. The file contains over 65 million sequences. Data are usually available within 3 days of publication.

**CAS REGISTRY** covers peptide and nucleic acid sequences from the basic patent publications of 63 patent authorities of CAplus and also sequences from more than 3,000 life science journals, books, dissertations, and GENBANK. The file is updated daily and contains about 72 million sequences (see also p. 10). REGISTRY sequences are linked to CAplus bibliographic information and value-added content.
**ABSTRACT:**

The invention relates to nucleotide sequence of a novel beta-(1,3) exoglucanase gene denoted as cbeg1 of the soil borne fungus Coniothyrium minitans. Beta-(1,3) exoglucanase (EC 3.2.1.58) is an enzyme that catalyses the successive hydrolysis of beta-D-glucose units from the non-reducing ends of 1,3-beta-D-glucans, releasing alpha-glucose. cbeg1 is specific for the substrate laminarin. cbeg1 sequences are useful for improvement of plant resistance to fungal phytopathogens or use in ruminant microbial transgenic strategies to improve feed digestion and nutritive carbohydrate availability from forage feed. cbeg1 is also useful for use in high temperature industrial applications such as bleaching of pulp. cbeg1 is useful as an antifungal in dicots and to promote plant growth in monocots and dicots. The present sequence is Coniothyrium minitans cbeg1 protein.
More patent databases on STN

**Thesaurus-supported patent classification searching**

STN offers online thesauri for all important patent classifications available in STN patent databases:

- International Patent Classification (IPC), Cooperative Patent Classification (CPC), European Patent Classification (ECLA) and In-Computer-Only (ICO) codes from the European Patent Office, Japanese F-term and FI-term classifications and US classification (USNCL). These thesauri are available in all patent files which cover the respective classifications.

Patent classification thesauri are easy navigation tools which can be used to view the definition of the codes and their respective hierarchies. They also provide good support for hierarchical classification and range searching. Single terms from the code definitions are searchable and help to identify appropriate classification codes.

**Full-text databases**

The records of all full-text databases contain bibliographic data including patent applicant and inventor, publication, application and priority number, IPC and CPC classification codes (except EPFULL and PATDPAFULL), abstract and the full text of descriptions and claims. Covered are all patent-relevant areas of science and technology, i.e., all classes of the IPC.

**AUPATFULL**

The Australian patent full text database covers the full-text of patent applications and granted patents published in Australia from 1966 onwards with the first publication from 1917. More than 1.45 million family records with over 2 million publications and about 0.6 million front page images (1917 to present) are available.

**CANPATFULL**

The Canadian patents full-text database covers the full-text of patent applications and granted patents published in Canada from 1906 onwards with the first document from 1869. Documents with full text are available from 1920 onwards. About 2.4 million family records with about 2.6 million publications and 1.5 million front page images (1920 to present) are available. About 50,000 documents are originally in French with human translated abstracts and machine translated descriptions and claims in English.

**CNFULL**

The Chinese patent full-text database covers the full-text of patent applications, granted patents, and utility models published in People’s Republic of China from 1985 onwards. About 18 million family records with about 22 million publications and 13 million front page images are available.

**DEFULL**

The German patents full-text database covers the full-text of patent applications, granted patents, and utility models published in Germany from 1879 onwards with the first document from 1877. About 6.4 million family records with about 7.7 million publications and 1.2 million front page images (1970 to present) are available. All text fields are available in English and German. Titles are human translated, abstract, descriptions and claims are machine translated.

**EPFULL**

The European patents full-text database covers the full-text of European patent applications and granted European patents as well as bibliographic records for PCT (Patent Cooperation Treaty) applications transferred to the EPO from 1978 onwards. The database is updated weekly on the day of publication. More than 5 million family records with about 8.9 million publications and 1.1 million front page images are available. The complete specification is given in one of the EPO’s official languages English, German, or French; titles are available in all three languages. Claims can be accessed in English, German or French for A-documents, for B-documents in all three
languages. Abstracts in the original publication language can be searched for A-documents. Fully searchable legal status data from the EPO Register as well as patent and non-patent literature are included.

**FRFULL**
The French patents full-text database covers the full-text of patent applications, granted patents, and utility models published in France from 1902 onwards with the first document from 1855. More than 2.4 million family records with more than 3.2 million publications and more than 2 million front page images (1902 to present) are available. All text fields are available in English and French. Titles are human translated, abstract, descriptions and claims are machine translated.

**GBFULL**
The Great Britain patents full-text database covers the full-text of patent applications and granted patents published in the United Kingdom from 1893 onwards with the first document from 1782 and patent applications starting from 1979 onwards. About 2.4 million family records with about 2.8 million publications and 1.8 million front page images are available.

**INFULL**
The Indian patents full-text database covers the full-text of patent applications and granted patents published in India from 1912 onwards. More than 0.72 million family records with more than 0.8 million publications and about 0.2 million front page images are available.

**JPFULL**
The Japanese patents full-text database covers the full-text of patent applications, granted patents, and utility models published in Japan from application year 2000 onwards. More than 6.3 million family records with over 9 million publications are available. All text fields are available in English. Title and abstracts are either machine translated (documents with kind code A later replaced by human translation) or taken from equivalent documents if available. Descriptions and claims are always machine translated. Title, patent applicant, inventor and agent are also available in Japanese characters.

**KRFULL**
The Korean patents full-text database covers the full-text of patent applications, patent specifications, and utility models published in the Republic of Korea from 1978 onwards. More than 4 million family records with over 5.5 million publications and 3 million front page images are available. This database is only available in new STN. All text fields are available in English and Korean. Titles and abstracts are initially machine translated and later replaced by human translated text. Descriptions and claims are machine translated. Patent applicant, inventor and agent are also available in Korean characters.

**PATDPAFULL**
PATDPAFULL contains the full text of German published patent applications as of 1987, granted patents as of 1990, translations of European patent documents (T2 documents) as of 1992, as well as German utility models as of 1999, filed with the German Patent and Trademark Office (DPMA). Additionally, bibliographic records for PCT (Patent Cooperation Treaty) applications and EPO (European Patent Office) application and granted patents transferred to the DPMA from 1978 onwards. About 3.2 million family records with about 5.8 million publications and 0.75 million front page images are available. The database is updated weekly on the day of publication.

**PCTFULL**
WIPO/PCT patent full-text database covers the full-text of PCT (Patent Cooperation Treaty) published applications issued under the auspices of the World Intellectual Property Organization (WIPO). At present, 150 member states participate in the PCT system from 1978 onwards. About 3.5 million records and 2.7 million front page images are available. The text fields are generally available in one or more of the official WIPO languages: Arabic, Chinese, English, French, German, Japanese, Korean, Portuguese, Russian or Spanish/Castilian. All these languages are searchable in the respective search fields. English machine translations of title, abstract, description, or claims are available for most documents with Chinese, French, German, Japanese, Korean, Portuguese, Russian or Spanish/Castilian as filing language. Patent assignee, inventor, and legal representative information in original non-Latin characters are available for search and display for most documents with filing language Chinese, Japanese, Korean, and Russian.

**USPAT2**
U.S. Patents Latest Publications, companion to USPATFULL, contains the complete text of U.S. patents and current classifications and classifications for the second or latest publications of U.S. patents and applications issued by the U.S. Patent and Trademark Office since 2001. More than 3.3 million family records are available.

**USPATFULL/USPATOLD**
U.S. Patents Original Publications contains the complete text of U.S. patents and current classifications for the original publication of patent documents issued by the U.S. Patent and Trademark Office from 1975 to the present. The database is updated twice per week on the day of publication. More than 9.5 million records are available. USPATOLD includes more than 3.6 million records and covers the full text of patents issued from the U.S. Patent and Trademark Office (USPTO) from 1790-1975.
National bibliographic databases

FRANCEPAT
FrancePat contains information on all French patent applications and granted French patents published by the Institut National de la Propriété Industrielle (INPI), including all patents published in France from 1961 to 2009 as well as all special pharmaceutical patents (Brevets Spéciaux Médicaments) published between 1961 and 1978.

IFIALL
IFIALL covers content from the former IFICDB, IFIPAT, and IFIUDB files including chemical and chemically related patents, mechanical and electrical patents, design patents, and US applications. Also provided are front page and bibliographic data, abstracts and claims from U.S. patents, standard bibliographic and patent data.

IFICCLAIMS
The IFICCLAIMS files (IFIPAT, IFIUDB, IFICDB, IFIREF, IFICLS) comprise up-to-date bibliographic and legal status information from USPTO publications. Chemical patents date back as far as 1950, providing a special chemical indexing.

JAPIO
JAPIO provides comprehensive English-language access to Japanese unexamined patent applications covering all fields of technology from 1973 to 2012.

PATDD
PATDD contains the bibliographic data of patent publications of the former German Democratic Republic (GDR) published up to 2 October 1990 and those of the German Patent and Trademark Office published after that date.

PATDPA
PATDPA contains bibliographic information for patent applications, granted patents and utility models published by the German Patent and Trademark Office from 1968 to 2011.

KOREAPAT
Contains bibliographic information, abstracts in English language and representative drawings of South Korean patent applications from 1979 to date.

RUSSIAPAT
RUSSIAPAT provides access to Russian patent information in English language from 1994 to date.

Databases with specific content

DPCI
Derwent Patents Citation Index (DPCI) is a unique database containing citations of patents and literature including those referenced by the examiner, inventor/author, or opposition/third party during the determination of patentability.

DWPIM
DWPIM is a structure-based database including more than 2.2 million Markush structures from more than 900,000 Derwent World Patents Index (DWPI) documents. A total of 33 patent authorities are covered. For US, EP and WO, coverage begins with 1978. Coverage also includes INPI (French patent office) backfile data from 1961-1998.

ENCOMPPAT
ENCOMPPAT contains information on patents relating to the petroleum and petrochemical industries from 1964 to the present.

INSPEC
Containing over 19 million records, INSPEC is one of the most relevant abstract and indexing databases for subject-specific and interdisciplinary research in the fields of engineering, physics and computer science. INSPEC covers the worldwide literature in physics, electronics and electrical engineering, computers and control engineering, information technology for business, and mechanical and production engineering.

LITALERT
LITALERT is a unique tool for researching litigation activity in U.S. patent and trademark portfolios. LITALERT includes records of IP lawsuits filed in the 94 US District Courts since 1973.

MARPAT
MARPAT®, the CAS Markush Search Service, contains the Markush structure records for patents found in CAplus™ with the patent publication year from 1988 to the present. Pre-1988 records are derived from INPI data. Markush structures of organic and organometallic molecules found in patent claims are included. Covered are more than 1.2 million Markush structures from 63 patent authorities.

RDISCLOSURE
RDISCLOSURE contains the full text, including images, of technical disclosures of inventions published as an alternative to the patent system. The inventions described in the disclosure are included in the state of the art, thus preventing them from being legally patented by a later applicant.
**REAXYSFILESub and REAXYSFILEBib**

**REAXYSFILESub** contains fully searchable chemical structures from the literature period 1771 to the present. Included are organic, inorganic and metal-organic compounds as well as polymers and biological molecules. The database is updated weekly and contains more than 28 million substances.

**REAXYSFILEBib** is the companion file to REAXYSFILESub covering the corresponding citations from journals and patents as well as from specific sources like dissertations, monographs or proceedings. Important historical patents are covered from 1803 to 1976, indexed patents from about 1976 onwards from WIPO (PCT), the USPTO and the EPO. The database is updated weekly and contains more than 8.6 million citations.

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