

## Free International Web-Based Patent Sites

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In recent years there has been a proliferation of free Internet-based patent information services: while there were five service providers with Web-based services in 1996, as of 2001, there were more than 50! Currently, two hosts dominate the free-of-charge services: the United States Patent and Trademark Office (USPTO) [<http://www.uspto.gov/>] and *esp@cenet*®, the service and portal offered by the European Patent Office [<http://www.espacenet.com/>] (Technopolis Group, 2001).

The USPTO and many European patent Web sites, however, not only provide free access to their respective patent information resources; many also offer access to a variety of relevant Intellectual Property sources and gateways to international and other national services. Nor are free Web-based patent services restricted to those offered by the United States and European countries; a number of non-Western na-

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tions have established Web-based patent services, many with English-language interfaces. In general, many of these services—like their Western counterparts—provide access to patent bibliographic data and abstracts, and in many cases, link to the full text of associated patent documents.

*CITE:* Technopolis Group, “Free Patent Information on the Internet: An Impact Assessment, Final Report, Draft in Confidence,” 2001. <[http://www.european-patent-office.org/epidos/conf/patlib2002/pres/schwanderp\\_te.pdf](http://www.european-patent-office.org/epidos/conf/patlib2002/pres/schwanderp_te.pdf)> (16 September 2002).

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*WHAT?* [China Patent Database]

*WHERE?* [http://www.sipo.gov.cn/sipo\\_English/default.htm](http://www.sipo.gov.cn/sipo_English/default.htm)

*WHEN?* July 2002

*WHY?* The *China Patent Database* is made available as a public service by the State Intellectual Property Office (SIPO) of the People’s Republic of China to publicize “the intellectual property policy of the state” and to provide “complete and comprehensive patent information service . . . for the purpose of creating better social and economic benefits to the country.”

*HOW?* The *China Patent Database* may be searched in one of three ways:

- basic search (single field search)
- ‘Quick Search’ (two field search)
- ‘Expression Search’ (simple or complex Boolean searching)

### ***Basic Search***

A basic search is provided directly from the English-language homepage of the State Intellectual Property Office of the People’s Republic of China (SIPO). By using a pull-down menu, it allows the user to search the *China Patent Database* by one of several fields, notably ‘Title,’ ‘Abstract,’ ‘Application Number,’ ‘Inventor(s) Name,’ ‘IPC’ (International Patent Classification), or ‘Applicant(s) Name.’

### ***Quick Search***

In addition to providing the field search options available in a basic search, a ‘Quick Search’ option allows users to also search by ‘Applica-

tion Date,' Publication Date,' 'Address,' and 'Attorney & Agent.' 'All Fields' can also be searched separately or in combination with a single field or another 'All Fields' option in either an 'AND' or 'OR' Boolean relationship. In addition, a single field may be searched individually or in combination with one other field with identical logical options.

### ***Expression Search***

Users may construct a simple or complex search using a select set of field codes and associated terms, phrases, numbers, or alphanumeric characters, separately or in a simple or nested Boolean statement (e.g., 'pd = 1998 and abst = glove'). The following codes are presently available and searchable:

- PN (Publication Number)
- PD (Publication Date)
- TTL (Title)
- ADDR (Address)
- APD (Application Date)
- IN (Inventor Name)
- ABST (Abstract)
- ICL (International Classification)
- APM [sic] (Applicant(s) Name)

Search results are displayed as a number list ('ID'). For each entry the application number ('App. No. '), and title are provided. The title is hotlinked to a full record that provides specific data for each of these searchable fields (e.g., 'Title: Non-dusting secondary immersion method of PVC gum gloves,' 'Application Number: 97106357,' 'Application Date: 1997.04.04,' 'Publication Number: 1195607,' 'International Classification: B29C 41/14'), and 'Abstract.' In addition, a field is provided for an 'Approval Pub. Date' and a 'Granted Pub. Date.'

Access to the full-text of patents is not directly available from the English-language service. Using data obtained from this English language search, users can retrieve select full-text documents as TIF images from the Chinese language patent search database [<http://www.jiansuo.com/>] by following instructions on searching the Chinese language interface provided by John Mayall [<http://www.mayallj.freemove.co.uk/china.htm>].

*WHO?* The *China Patent Database* is provided by the State Intellectual Property Office of the People's Republic of China, Beijing.

*CITE:* IP Menu, "July 2002 to August 2002: Tuesday, 23 July 2002: State Intellectual Property Office of China Database," 2002. <<http://www.ipmenu.com/archive/July2002toAugust2002.htm>> (17 September 2002).

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*WHAT?* DEPATISnet

*WHERE?* <http://www.depatiset.net/>

*WHEN?* April 2001 (German) / June 2001 (English version)

*WHY?* *DEPATISnet* is a service provided by the German Patent and Trade Mark Office (Deutsches Patent- und Markenamt), Munich. *DEPATISnet*, the German Patent Information System on the Internet, allows users to perform online searches free-of-charge for patents contained in the DEPATIS data archive.

*HOW?* *DEPATISnet* provides access to all German patents issued since 1877 and those made available from the national patent offices of Australia, Austria, France, Italy, Japan, Switzerland, the United Kingdom, and the USA. *DEPATISnet* is an archive of more than 20 million patent documents published worldwide, and includes more than 5 million Japanese abstracts. Nearly 1 million new documents are currently added each year.

Within *DEPATISnet*, full-text searching is available for all German patent applications ('Offenlegungsschriften') and patents granted since 1987. For other patent documents, search options will vary, although searching by document number and the International Patent Classification (IPC) scheme are standard.

A variety of search modes are offered to meet the needs of casual and expert users, including the following options:

### ***Beginner's Search***

This mode is suitable for simple queries (e. g., 'publication number,' 'title,' 'applicant,' etc.). Fields can be searched separately or in combination.

### ***Expert Search***

In the 'Expert' mode users can compose search statements by selecting from a scrollable menu of field names and associated labels, as well as common and uncommon Boolean operators (e.g., 'AND,' 'OR,'

'NOT'), comparison operators (e.g., '>' (greater than), '<' (less than), '=' (equal to), and IKOFAX proximity operators (e.g., '(W)' (search terms in the specified order without other intervening terms), '(P)' (documents containing the search terms within the same paragraph), and '(L)' (documents containing the terms within the same field).

### ***IKOFAX Search***

In this mode, experienced searchers are offered the opportunity to use the internal system query command language named IKOFAX. Using this search option and the command search structure, all indexed fields are searchable and users can construct detailed and complex search statements.

### ***Patent 'Family' Search***

The patent 'Family' search allows users to identify documents that are members of a patent family, either from the patent 'Family' search mode, or directly from the search result list.

When a search has been performed, a results list is displayed. The selection of an entry will provide bibliographic data (title, applicant, inventor, etc.) for the patent. The full text of the patent can be displayed in PDF format, if available, as indicated by a PDF icon. Users can browse entries backwards and forwards, and for those documents with full text, display select sections of a document (e.g., 'bibliographic data,' 'first page,' 'abstract,' 'description,' 'claims,' 'drawing,' etc.).

*WHO?* *DEPATISnet* is a service provided by the German Patent and Trade Mark Office (Deutsches Patent- und Markenamt), Munich.

*CITE:* European Patent Office, "A New Free Internet Service from the German Patent Office," 2001, *EPIDOS News Online* 2/01. <[http://www.european-patent-office.org/news/epidosnews/source/epd\\_2\\_01/7\\_2\\_01\\_e.htm](http://www.european-patent-office.org/news/epidosnews/source/epd_2_01/7_2_01_e.htm)> (25 February 2001).

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*WHAT?* Industrial Property Digital Library

*WHERE?* [http://www.ipdl.jpo.go.jp/homepg\\_e.ipdl](http://www.ipdl.jpo.go.jp/homepg_e.ipdl)

*WHEN?* March 1999

*WHY?* The *Industrial Property Digital Library* (IPDL) is a patent and trademark service made available by the Japanese Patent Office to provide free public access to resources that were historically available only at select offices and libraries. As of April 2002, approximately 47 million 'IP-related documents' are available through the site [<http://ship.mind.meiji.ac.jp/lib/sympo5/overview/fuji.pdf>].

*HOW?* The English-language version of the *Industrial Property Digital Library* provides access to the Japanese patent database through a variety of interfaces, notably a standard patents search ('Searching PAJ'), a Japanese patent classification code search interface ('FI/F-term Search'), a Japanese patent classification code browse and search interface ('Patent Map Guidance'), and a 'Patent & Utility Model Concordance.' The 'FI' ('File Index') and 'F-Term' are patent classification schemes developed by the Japan Patent Office [<http://www.jpo.go.jp/infoe/pdf/paj21.pdf>] [[http://www.european-patent-office.org/news/epidosnews/source/epd\\_3\\_01/11\\_3\\_01\\_e.htm](http://www.european-patent-office.org/news/epidosnews/source/epd_3_01/11_3_01_e.htm)].

On the English-language homepage patent resources are grouped within the 'Patent & Utility Model' category ('2.'). The Japanese interface for the IPDL offers access to these and several other specialized patent and trademark databases [<http://www.ipdl.jpo.go.jp/homepg.ipdl>].

In addition to the JPO database and its various interfaces, the English-language homepage, through a linked list, provides access to various regional (e.g., Australian, Korean, and New Zealand) and U.S., European, and international, patent Web sites (e.g., USPTO, European Patent Office, WIPO).

### ***Searching PAJ***

From this interface, users can search the JPO database by applicant name, title, or abstract, separately or in combination. In addition, results may be limited by date and/or by International Patent Classification (IPC). The database can also be searched by application, publication, or patent number, or 'number of appeal against examiner's decision of rejection'.

If results are greater than 1,000 records, the system will suggest that the search be refined. For searches with results less than 1,000 entries users can display a list of relevant entries by clicking on the 'Index Indication' button at the top of the results page, which will display a listing of retrieved records in reverse chronological order by 'Publication No.' Upon selecting the hyperlinked publication number (e.g., '2001-249755'), a

brief record with basic bibliographic information will be displayed with a selected figure. In selecting the 'Detail' button at the top of this record, a second window is opened that provides options for retrieving other sections of the patent (e.g., 'detailed description,' 'technical field,' 'prior art,' 'effect of the invention,' 'technical problem,' 'means,' 'description of drawings,' 'drawings'). The English-language patent text is created by 'machine translation.'

*WHO?* *Industrial Property Digital Library* is a patent and trademark service made available by the Japanese Patent Office [<http://www.jpo.go.jp/index.htm>].

*CITE:* Seiji Banno, "Industrial Property Digital Library," Presentation at *PATLIB 2000: The Next Generation*, May 16-18, 2000, Helsinki, Finland <<http://www.european-patent-office.org/epidos/conf/patlib2000/presentations/bannos.pdf>> (14 September 2002).

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*WHAT?* Intellectual Property Digital Library

*WHERE?* <http://ipdl.wipo.int/>

*WHEN?* January 2001

*WHY?* The objective of the *Intellectual Property Digital Library* (IPDL) project is to facilitate access to and exchange of intellectual property information to provide "a tool for technology transfer and economic development to the benefit of developing countries and their inventors, industry, universities and research and development institutions."

*HOW?* The *Intellectual Property Digital Library* Web site provides access to various intellectual property databases currently hosted by the World Intellectual Property Organization (WIPO). These databases include the Hague Express Database, the Madrid Express Database, the PCT Electronic Gazette, and the non-patent reference data from the *Journal of Patent Associated Literature* (JOPAL) [<http://ipdl.wipo.int/en/search/search.shtml>]. Currently, two levels of access are available for each database: 'Account' and 'Guest.'

### ***Hague Express Database***

The Hague Express Database includes bibliographical data and figures or images of industrial designs relating to international deposits

that have been recorded in the WIPO International Register and published in the *International Designs Bulletin* as of issue No. 1/1999.

### ***Madrid Express Database***

The Madrid Express Database provides access to all international trademark registrations that are currently in force or have expired within the past six months. It also includes data relating to international applications and subsequent designations that have been received by the WIPO International Bureau but not yet recorded in its international register of marks.

### ***PCT Electronic Gazette***

The PCT Electronic Gazette database provides 'first page data' (bibliographic data, abstract, and drawing) of Patent Cooperation Treaty (PCT) applications published since January 1997. The PCT simplifies and reduces the cost of obtaining international patent protection. By filing one international patent application under terms of the PCT, an inventor can "simultaneously seek protection for an invention in over one hundred countries . . . throughout the world."

The database may be searched using an advanced search interface, a 'Simple Search' interface [<http://ipdl.wipo.int/en/search/pct/search-simp.html>] or a 'Structured Search' interface [<http://ipdl.wipo.int/en/search/pct/search-struct.html>]. The advanced search, the default, allows users to perform a free-text or field search (e.g., 'ET' (English title), 'ABE' (English Abstract), 'PA' (applicant name)) [<http://ipdl.wipo.int/en/search/pct/search2.html>]. The entire database may be searched or limited to the current week (e.g., '12.09.2002'). Results may be sorted chronologically or by relevance; full records may be displayed in a 'Basic,' 'Gazette,' or 'Front Page' format. In addition, users can specify the types of data to be displayed in the results listing (e.g., publication date ('Pub. Date'), assigned international classification ('Int. Class.'). application number ('App. Num.'). 'First Inventor,' 'First Applicant,' 'Abstract,' and/or 'Image' (None/Small/Large); publication number ('Pub. No') and 'Title' are standard. Results may be displayed as lists of 10, 25, or 50 entries.

The full-text of a PCT application is accessible by clicking the 'View Images' button located in the upper left-hand corner at the top of the application record, when available. (Full-text data is provided fourteen days after the application is formally published.) Applications are provided in PDF format through a link to the esp@cenet® patent service of the European Patent Office [<http://www.european-patent-office.org/espacenet/info/index.htm>].

*WHO?* World Intellectual Property Organization (WIPO) [<http://www.wipo.int/about-wipo/en/>]

*CITE:* World Intellectual Property Organization, *IPDL SCIT Documentation*, n.d. <<http://www.wipo.int/scit/en/ipdl/index.htm>> (17 September 2002).

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*WHAT?* SurfIP

*WHERE?* [http://www.surfip.gov.sg/sip\\_home.htm](http://www.surfip.gov.sg/sip_home.htm)

*WHEN?* July 2000

*WHY?* *SurfIP* is “a special project of the Intellectual Property Office of Singapore (IPOS) . . . developed to serve the . . . [intellectual property] community as a One-Stop first-stop portal for intellectual property information.” Through *SurfIP*, users “can search for information relating to the Biotechnology, IT, Telecommunication and Manufacturing Industries,” and other areas.

*HOW?* *SurfIP* offers member- and non-member-based services: non-members can use “the Patent and Web Interactive Search Banner . . . , Business News Search Banner and IP Events Search Banner” . . . and most of the information services; registered *SurfIP* ‘Associate Members’ can access: *SurfIP* Research, *SurfIP* Marketplace, and *SurfIP* Services; and ‘Premium Members’ can access: *SurfIP* Research, *SurfIP* Marketplace, *SurfIP* Services, and TRRU® Metrics IP Valuation [[http://www.surfip.gov.sg/reg\\_member\\_plans.htm](http://www.surfip.gov.sg/reg_member_plans.htm)].

### **SurfIP Research**

*SurfIP* Research provides access to selected patent, technical and business sources and offers the following search options:

- Simple Search (free-text searching across selected patent, technical and business sources);
- Structured Search (field searching);
- Patent Number Search (patent or application number); and
- IPC Search (International Patent Classification).

### **SurfIP Marketplace**

*SurfIP* Marketplace is a ‘platform’ for Intellectual Property owners “to market and commercialize their IP assets through licensing and sales” and offers the following search or management options:

- Simple Search (free-text searching across selected patent, technical and business sources);
- Structured Search (fields searching);
- Boolean Search; and
- Portfolio Management facility (for creating, managing, tracking Intellectual Property listings).

### **SurfIP Services**

*SurfIP* offers access to a variety of relevant information and services:

- ‘Panel of Advisors’ (directory of “lawyers, accountants, insurers and technical specialists,” who offer Intellectual Property consultation services);
- ‘IP Directory’ (directory of Intellectual Property law firms and services located in Singapore);
- Information services (e.g., news, articles and Intellectual Property ‘Resources,’ e.g., ‘Singapore IP Law Resources’).

### **Miscellaneous**

*SurfIP* also offers a variety of associated services and functionalities:

- Online translation (“machine translation” of English text into Chinese, Japanese, Korean, and European languages) *SurfIP* Research only;
- ‘Cross-Lingual Chinese Searching.’ *SurfIP* Research only;
- Current awareness (daily, weekly, or monthly updates) *SurfIP* Research and *SurfIP* Marketplace;
- Bookmarking; print, download, or e-mail delivery, and stored searches.

### **Searching**

The main search page provides users with the opportunity to search one or more patent and/or Internet search engines, separately or concurrently. Presently, access is provided to the patent databases offered by

the Intellectual Property Office of Singapore (IPOS); the World Intellectual Property Office (WIPO); European Patent Office (EPO); the Patent Office (Great Britain) (UKPO); the United States Patent and Trademark Office (USPTO); the Japanese Patent Office, Industrial Property Digital Library (JPO-IPDL); the Canadian Intellectual Patent Office (CIPO); and the Intellectual Property Office (Taiwan) (Taipei PI). In addition access is provided to AltaVista® and Google™.

*WHO? SurfIP* is provided by the Intellectual Property Office of Singapore (IPOS) [<http://www.ipos.gov.sg/>].

*CITE:* Daniel Buenas, "Intellectual property search portal launched," *Business Times* (Singapore), 14 July 2000, Singapore News, p. 8. <<http://www.surfip.gov.sg/news/20000714/BusinessTimes.htm>> (14 September 2002).

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### ***NOMINATIONS***

Members of the science and technology community are invited to nominate quality science and technology Web sites and resources for potential review in *Sci-5*. Of greatest interest are sites with uncommon but useful content, and those with innovative features and functionalities. Nominations should be sent to Gerry McKiernan ([gerrymck@iastate.edu](mailto:gerrymck@iastate.edu)).