

# CWS.ATR.PI.2013.JP

## Annual Technical Report 2013 on Patent Information Activities submitted by Japan (CWS /ATR/PI/2013/JP)

Where URLs are requested below, it is preferred that either URLs which are likely to remain stable over time (three years or more) are provided, or home (main) page URLs are provided with a short explanation of how to access the corresponding information.

The term "patent" covers utility models and Supplementary Protection Certificates (SPCs). Offices which issue design patents should report their design patent information activities in their Annual Technical Reports on Industrial Design Information Activities.

### I. GENERAL OVERVIEW OF RECENT DEVELOPMENTS IN PATENT INFORMATION ACTIVITIES CARRIED OUT BY THE OFFICE

#### Outline of main policies and plans aimed at development of patent information activities and expected time frames for their realization

The Japan Revitalization Strategy and the Basic Policy Concerning Intellectual Property Policy decided by the cabinet in June 2013 clarify issues related to intellectual property policies. The Intellectual Property Committee under the Industrial Structure Council has discussed measures for addressing these issues related to intellectual property policies which the JPO should further accelerate and give priority to taking into account environmental changes in Japanese companies and the IP system. The Intellectual Property Committee has discussed a future direction of measures to be taken by the JPO, thereby sorting out three points to be aimed at and summarizing the specific policy issues based thereon.

Then, in March 2014, the JPO adopted the realization of the "the world's fastest and utmost quality IP system" as one of its goals based on the said summarization of the Intellectual Property Committee. The specific measures are explained below.

##### a. Realization of an environment where Chinese and Korean documents can be searched in Japanese

From the viewpoint of supporting focused R&D by Japanese companies and efficient acquisition of rights of achievements made thereby, the JPO will accelerate the development of an information system which allows users to refer to and make full-text searches on Chinese and Korean documents in precisely-translated Japanese which account for nearly 50% of patent applications filed globally and may contain the world's most advanced technologies.

Chinese publication of unexamined patent applications, Patent Gazettes and publication of utility model applications as well as Korean publication of unexamined patent applications, Patent Gazettes and publication of utility model applications are subject to translation and search in this system. This service is expected to be launched in January 2015. At the time of its launch, documents in the past ten years would be contained in the system and documents will be added thereto gradually after its launch. It is expected that Chinese documents can be referred to and searched, in principle, within one month from their publication.

In this system, Chinese and Korean documents are translated into Japanese by machine translation. The JPO will strive to improve the accuracy of machine translation of Chinese documents in particular by making effective use of Chinese-Japanese bilingual dictionary data created in the past. This system will be available via the Internet from inside and outside the JPO.

In FY2014, the JPO will develop and test this system toward its launch in January 2015 and translate past documents by machine and accumulate them in the system.

##### b. Realization of the world's utmost quality service to provide information on intellectual property rights

The JPO will renovate the IPDL to convert it into a new information infrastructure aimed at providing the world's utmost quality service better than similar services provided by the WIPO or the EPO keeping in mind the share of roles between the private and public sectors. Specifically, the JPO will undertake the following initiatives.

###### (i) Enhancing the service to provide bulk information on intellectual property rights

The JPO will efficiently provide bulk information owned by it via the Internet from the viewpoint of creating a better environment where this service is provided by private information providers. Moreover, the JPO will positively make its own data available unless there is any specific problem.

###### (ii) Realizing a new Internet search/inquiry service

The government has the responsibility for providing the wide general public including business operators and universities with information in a prompt manner. A new Internet search/inquiry service provides basic information on national and international intellectual property rights which is publicized in gazettes, etc. together with other standard functions taking into account the status of information provision of other Offices, in order to promote the dissemination of information to individuals and SMEs that have any difficulty in accessing such information particularly in terms of costs.

In addition, the JPO will strive to speed up information provision and improve user interface based on the function of linking different services in the process of realizing this service. The JPO will look for a possibility of this new services provided by other Offices and cooperating with research institutes for the purpose of introducing this new service as early and efficient as possible.

#### New projects launched or resumed this year in the context of the policies and plans mentioned above, short description: aims, partners, tasks

Please refer to the subject mentioned above.

#### Main areas of patent information activities and related information and communication technology (ICT) practices which were in the focus of attention last year

The JPO started to assign Japanese classifications (FI/F terms) to Chinese documents of some technical fields in response to the rapid increase in Chinese documents in recent years in global patent documents. In FY2013, Japanese classifications were assigned to 35,000 Chinese patent documents publicized in 2011.

### **Statistics: changes in terms of application filings and grants with respect to previous year; trends or areas experiencing rapid changes**

#### **(1) Patent**

In 2013, the number of applications was 328,436 (down 4.2% from the previous year) and the number of registrations was 277,079 (up 0.8% from the previous year).

#### **(2) Utility model**

In 2013, the number of applications was 7,622 (down 6.0% from the previous year) and the number of registrations was 7,363 (down 8.6% from the previous year).

In 2012, the number of patent applications in the following technical fields has significantly increased compared to the previous year.

"A63 Sports; Games; Amusements" (up 25.9% from the previous year)

"G21 Nuclear Physics: Nuclear Engineering" (up 21.6% from the previous year)

In 2012, the number of patent applications in the following technical fields recorded significant declines from the previous year.

"G11 Information storage" (down 21.9% from the previous year)

"H03 Basic electronic circuitry" (down 14.7% from the previous year)

Note: IPC classes with 500 or more applications in 2012 were examined.

### **Other matters and useful links (URLs): annual report of the Office, news page, statistics, etc.**

(Annual Report in Japanese) <http://www.jpo.go.jp/shiryoutoukei/gyosenenji/index.html>

(Annual Report in English) [http://www.jpo.go.jp/index\\_e/reference\\_room.html](http://www.jpo.go.jp/index_e/reference_room.html)

## **II. SERVICES AND ACTIVITIES RELATED TO PATENT INFORMATION CARRIED OUT BY THE OFFICE**

### **Information and support provided by the Office to applicants regarding filing on paper and/or e-filing (instructions, seminars, etc.) – URLs**

#### **a) Paper-based application**

The INPIT provides the free consultation service on the procedures for industrial property rights at the Consultation Department on the second floor of the JPO office building. Moreover, the on-line consultation service on frequently asked questions is available on a 24-hour basis at <http://faq.inpit.go.jp/>.

#### **b) Electronic application**

The INPIT has developed software for electronic application, enabling administrative procedures such as the filing of applications for patents, utility models, trademarks and industrial designs, appealing for trials and payment of the annual fees, and receipt of documents dispatched from the JPO, to be conducted on-line. The software can be downloaded for free at: <http://www.inpit.go.jp/pcinfo/index.html>.

### **Availability of the application dossier in electronic form**

#### **a) (On-line) Search for Examination (Dossier) Information**

The IPDL (Industrial Property Digital Library) allows users to search various examination documents such as notifications of reasons for refusal, written opinions and written amendments issued in July 2003 onwards by using various document numbers such as filing number and publication number.

This service is only available on the Japanese IPDL at <http://www.ipdl.inpit.go.jp/Tokujitu/pfwj.ipdl?N0000=118>

#### **b) On-line reference**

The software for electronic application allows users to request or refer to application documents and registers from computers from their home or office, and to make a request for issuing certifications on-line.

Refer to 2.(1)b) for the software for electronic application.

### **Classification<sup>1</sup>, preclassification<sup>2</sup> (if applicable), reclassification<sup>3</sup> activities; classification systems used (e.g., International Patent Classification (IPC)); matters concerning indexing of patent information**

In 2013, the number of applications classified by the JPO applying the International Patent Classification was: about 330,000 when the application was laid open, about 280,000 when the Patent Gazette was issued, and about 8,000 when the registered utility model gazette was issued.

The JPO positively participated in the activities for the revision of the IPC, and sent their delegates to IPC-related WIPO meetings for aggressive activities.

### **Abstracting, reviewing, and translation of the information contained in patent documents**

a) Abstracts and inspections

From December 1, 1990, the JPO requires applicants filing patent application and utility model application to submit an Abstract in addition to filing documents. The Abstract is inserted into the front page of a Gazette together with the bibliographic matters such as the name of the applicant, the title of the invention. Although the Abstract is prepared by the applicant, in order to enhance its utility as the front-page database, the JPO checks whether the content of the Abstract is appropriate, and if it is found inappropriate, the Abstract is modified by the office.

b) Translation

1) Production of English Abstracts of Publication of Unexamined Patent Application in Japan

Patent Abstracts of Japan (hereinafter referred to as the "PAJ") consists of English abstracts, with a representative drawing, of published unexamined patent applications filed by Japanese applicants and has been issued since 1976. The JPO has been sending PAJ to the foreign patent offices.

Since April 1995, for the publications of patent applications issued from October 1994 onwards, PAJ has been issued in a mixed mode CD-ROM format instead of the conventional paper booklet form. The PAJ CD-ROM is produced with the MIMOSA software that was jointly procured by the Trilateral Patent Offices (EPO, JPO, and USPTO). Currently the PAJ is sent to about 80 foreign patent offices and public institutions.

PAJ issued in the paper booklet form (from 1976 to 1993) were subsequently sorted into 69 technical fields and published by IPC section on 99 CD-ROMs.

Starting from the April 1998 issue, all applications by both Japanese and foreigners have been issued in PAJ. In February 2012, the existing SGML data format was changed into an XML-based data format.

The PAJ/CD-ROM is sold to the general public, and can be used to create in-house database or to provide information services to a third party.

2) Termination of production of PAJ/INDEX CD-ROM

The PAJ/INDEX CD-ROM contains bibliographic data, and abstracts of PAJ, and the disk number of the corresponding PAJ/CD-ROM.

The JPO has published the PAJ/INDEX CD-ROM quarterly since April 1997. The information stored on each PAJ/INDEX CD-ROM is accumulated based on a 3-month period and covers not more than a one-year period. The PAJ/INDEX CD-ROM is also sent to the foreign patent offices and public institutions that currently receive the PAJ/CD-ROM. However, the JPO terminated this service in March 2014.

3) Foreign patent documents

Refer to 5.(3).

Since October 2004, the services from 1) to 3) above have been operated by the National Center for Industrial Property Information and Training (the "INPIT").

### III. SOURCES OF PATENT INFORMATION PROVIDED BY THE OFFICE

**Main types of publications of the Office (patent applications, full text, first pages, abstracts, bibliographic data, granted patents, etc.), medium (on paper, on CDs, online – URLs)**

#### 1) Main types and media of publications

The Japan Patent Office (hereinafter referred to as the "JPO") published the following patent documents in 2013:

- Published Unexamined Patent Applications: DVD-ROM
- Published Japanese Translation of PCT International Publication for Patent Applications: DVD-ROM
- Published Registered Utility Model Applications: Internet
- Patent: DVD-ROM
- Decision on Appeal/Trial in Patent: CD-ROM

The following is the URL of published registered utility model applications provided through the Internet.

URL: <http://www.publication.jpo.go.jp/utility/do/usr/topmenu?lang=e>

#### 2) Outline of published gazettes

In December 1990, the JPO began accepting patent applications and utility model applications filed by floppy disk (Floppy disk application was abolished in 1999) or on-line (electronic application). The JPO electronically edits the collected data acquired from the electronic applications (including paper-based applications converted into electronic data) and compiles them and publishes the Patent and Utility Model Gazettes.

The Patent and Utility Model Gazettes contains mixed-mode type data, composed of text data and image data, thus text search using text data is also available.

In July 2003, the JPO changed the domestic application forms of patent and/or utility model to conform to the PCT international application form and internationally standardized the electronic formats (use of XML forms).

##### a) Published Unexamined Patent Applications

Since January 1993, the JPO has been issuing Published Unexamined Patent Applications in the form of CD-ROMs.

Since January 2004, the format of Published Unexamined Patent Applications was changed from SGML to XML and the media was changed from CD-ROM to DVD-ROM.

On average a single volume of Published Unexamined Patent Applications on DVD-ROM includes about 4,500 issues and was issued 69 times in 2013.

Published Unexamined Patent Applications on DVD-ROM enable a search using 16 items as search keys, including document numbers, IPC, the name of the applicant and the title of the invention.

##### b) Japanese Patent and Registered Utility Model Specifications

Between January 1994 and March 1996, the JPO issued Japanese Patent and Registered Utility Model Specifications in the form of CD-ROMs. From May 1996, "Japanese Patent and Registered Utility Model Specifications in the form of CD-ROMs" which includes the post-grant registered (Japanese patent and Registered Utility Model Specifications)

From July 2004, the format of Japanese Patent and Registered Utility Model Specifications was changed from SGML to XML and the media was changed from CD-ROM to DVD-ROM.

A single volume of the Japanese Patent and Registered Utility Model Specifications on DVD-ROM includes an average of about 5,600 issues and it was issued 48 times in 2013.

Japanese Patent and Registered Utility Model Specifications on DVD-ROM enables a search using 22 items as search keys, including document numbers, IPC, the name of the applicant and the title of the invention.

##### c) Published registered utility model applications using the Internet

Published registered utility model applications which had been recorded and published in DVD-ROM publications of unexamined applications until 2005 have been changed to gazette publication once a week using the Internet since January 2006.

This makes it possible to download gazettes for free 24 hours a day and 365 days a year.

In addition, in order to meet the needs of the long-term storage of the original gazettes data published via the Internet, the JPO prepares and makes available, one week after the publication of the original gazettes, DVD-ROMs titled "Information on Published Registered Utility Model Applications" which contains exact reproductions of the original Published Registered Utility Model Applications which have been published through the Official Publication via the Internet.

A single-volume of the Published Registered Utility Model Applications includes an average of about 200 issues and it was issued 50 times in 2013.

### **Official Gazettes: main types of announcements, frequency of publication, medium (on paper, on CDs, online – URL), etc.**

Nothing in particular

### **Information products and patent document collections (coverage, medium, etc.) available to examiners, including external collections and databases**

#### a) Off-line

##### a-1) LiqCryst

The JPO stores to the PC a database of liquid crystal materials, provided in CD-ROM format by the University of Hamburg, Federal Republic of Germany, thereby enabling a search.

##### a-2) Code V

This system enables database searches for various optical properties of lens systems shown in the documents in the public domain which are published by the Optical Research Associates based on the conditions established by said optical properties.

#### b) External databases

JPO examiners use the following external database as a means of search. These are available on-line using terminals established in JPO.

b-1) Nature.com

A website for searching the issues of Nature, a journal containing papers on science and technology, and related journals.

b-2) JDream III

A scientific and technical document search system, provided by Japan Science and Technology Agency (JST).

b-3) STN

A search system for the database of the science and technology field which is mainly used for searching CAS-related databases.

b-4) Science Direct

A searchable internet website provided by Elsevier that provides access to more than 2,000 journals in the field of science, technology, medicine and social science published by the Elsevier Group, and bibliographic databases such as EMBASE, Compendex and reference works, etc.

b-5) IEEE Xplore

A searchable internet website provided by IEEE/IEE that provides access to their publications including magazines and minutes, IEEE standard, etc.

b-6) Thomson Innovation

A searchable Internet website for searching abstracts of worldwide patent documents using WPI data.

b-7) ACM/DL

A searchable internet website provided by the Association for Computing Machinery (ACM) for searching their scientific association journals.

b-8) Phama Business

A searchable internet website provided by Nikkei Business Publications Inc. for searching biotechnology-related articles published in the "Nikkei Biotech" magazine.

b-9) INTERGLAD

A searchable internet website provided by the New Glass Forum for searching a glass composition characteristic database.

b-10) Science

A searchable internet website for searching biotechnology-related information published in the "Science" magazine.

b-11) ProQuest

An internet search site provided by PQIL Limited for searching economy and finance-related documents.

b-12) Scopus

A searchable on-line bibliography providing access to approximately 19,000 academic journals covering a wide range of technological fields.

b-13) G-Search

A searchable internet website for enabling search for full text articles on general newspapers, industrial journals and specialty magazines.

b-14) NRI Cyber Patent Desk 2

A searchable internet website enabling search for abstracts of company technical journals and enabling concept-based search.

b-15) Scitation

A searchable internet website provided by AIP for searching journals titled "Journal of Applied Physics," "Applied Physics Letters," "Review of Scientific Instruments," etc.

b-16) I-Chu-Shi WEB

An on-line bibliographic database that indexes periodicals on medicine, pharmacy, dentistry and other related areas.

b-17) ProQuest Dialog

An on-line information search system that contains about 100 databases such as information on documents and news mainly on the fields of medicine, pharmacy and science technology.

b-18) APS Journals

A searchable website that provides access to all journals published by the American Physical Society.

b-19) SpringerLink

A searchable internet website for searching life-science, chemical/material, information, engineering, medical, physics journals published by Springer

b-20) JJAP

An on-line internet search site of the JJAP (Japanese Journal of Applied Physics) published by the Japan Society of Applied Physics.

b-21) Colour Index

A searchable internet website for searching information on colorants and pigments.

b-22) Chemical Documents Library

An on-line Internet search site for full-text searches and inspection of the "Chemical Handbook," the "Experimental Science Course," and the "Standard Chemical Term Dictionary" edited by the Chemical Society of Japan as well as searches of compounds based on the "Chemical Handbook: Basic Edition; Revised 5th Edition; CD-ROM."

b-23) CiNii

A searchable internet website covering about 2.8 million papers from academic and association journals published in Japan and abroad, which are owned by the NII (National Institute of Informatics).

b-24) ACS Publications

An on-line journal website providing access to the journal articles published by the ACS (American Chemical Society).

b-25) GeneCards

A searchable integrated database on information on human genes, such as the genetic structure, function, expressivity, SNPs of genetic

disorders and related journal articles.

**b-26) Medical On-line**

A searchable internet website of medical, dentistry and pharmaceutical journal articles published by Japanese academic associations and publishers.

**b-27) Wiley On-line Library**

An electronic journal website which contains about 1,500 journals in fields of medicine, pharmaceuticals, medical equipment, etc.

**b-28) Annual Review**

An Internet website which allows you to browse reviews published each year by Annual Reviews and written by major scientists mainly in the fields of biotechnology, medicine and physics.

**b-29) Oxford Journals**

An on-line document database provided by Oxford University Press which contains documents related to life-science and pharmaceuticals

**b-30) Technical Disclosure Web**

A website for searching articles that appeared in the "Technical Disclosure" journal published by the Japan Institute of Invention and Innovation.

**b-31) Optics InfoBase**

A website for accessing journals published by the OSA.

**b-32) Merck Index**

An on-line database of chemical substances. With entries on about 11,000 compounds, the website enables access and searching for physical properties, uses and selected literature references.

**b-33) J-STAGE**

A searchable Internet website for comprehensively searching various on-line journal websites.

**b-34) Collection of Czechoslovak Chemical Communications**

A searchable Internet website for browsing the Collection of Czechoslovak Chemical Communications which contains journals of technical fields related to chemistry and biochemistry.

**b-35) RSC Publishing**

A website of chemical journals operated by the Royal Society of Chemistry.

**b-36) Electrochemical Society**

An Internet website for browsing magazines issued by the Electrochemical Society.

**b-37) AACR Publications**

An Internet website for browsing on-line journals related to cancer treatment provided by the American Association for Cancer Research (AACR).

**b-38) Mintel GNPD**

An Internet website for searching databases in which information such as names, all raw materials, time of sales, purpose of use of commercial products (cosmetics, health-care products, food and beverages, domestic products and pet-care products) is registered.

**Information products and patent document collections (coverage, medium, etc.) available to external users, conditions of access (e.g., free of charge, subscription, etc.)**

**a) Providing IP rights information via the Internet**

The website of information on patents/utility models is as follows:

[http://www.ipdl.inpit.go.jp/homepg\\_e.ipdl](http://www.ipdl.inpit.go.jp/homepg_e.ipdl) (Industrial Property Digital Library (IPDL))

The JPO has been providing the Industrial Property Digital Library (IPDL) service since March 1999. This service is accessible through the Internet and covers 98 million items of IP information by using document numbers and classifications as search keys. This service was transferred to the National Center for Industrial Property Information and Training (the "INPIT") as of October 2004, and has been operated there since.

The main patent information related services provided by the INPIT are as follows;

**(1) Simplified Search for beginners (patent and utility model)**

This search method is for beginners who are not familiar with IP information. Patent and utility model gazettes on CD-ROMs and DVD-ROMs and on-line (Published patent applications, the Japanese translation of PCT international applications, domestic republishings of PCT international applications and Registered Utility Model Applications) issued since 1993 can be searched by using free words.

**(2) Patent/utility model gazette database search**

Various patent and utility model gazettes (including the publications of patent applications, examined applications and registrations), published from 1885 onwards can be searched by using the document number. Download and printing of the Official Gazettes on a document-by-document basis has become possible since March 2006. An English version is available.

**(3) Index inquiry of patent/utility model documents by document numbers**

Inquiry of patent/utility model gazettes published since 1921 can be made by using various numbers. An English version is available.

**(4) Gazette text search**

Running a general search or entering document numbers enables access to publications of unexamined patent/utility model applications issued in January 1993 and thereafter, patent/utility model gazettes issued in January 1994 and thereafter, and publications of registered utility model applications issued in July 1994 and thereafter. Starting from March 2006, each document from the publications was also made available in PDF format for separate downloading and printing. In March 2007, Japanese abstracts of U.S. patent descriptions and descriptions of unexamined patent applications were added to the documents subject to search and the number of columns to input search items was increased. In March 2008, full-text search was made possible in the gazette text search service. In November 2009, Japanese abstracts of European descriptions were added to the documents subject to search. In March 2010, the NOT operation function was added and a principal applicant and a right holder of gazette became subject to the list screen of search results. In March 2012, Japanese abstracts of machine translated Chinese utility model documents were added to the documents subject to search. In March 2013, Japanese abstracts of Chinese patents translated by the

human were added to the documents subject to search. In September 2013, the function of displaying Japanese abstracts of Chinese patents and English abstracts of Chinese Patents (including some drawings) on one screen, and displaying Japanese machine translated abstracts of Chinese utility model documents, and English abstracts of Chinese utility model documents (including some drawings) on one screen respectively was added. Moreover, in March 2014, the function of searching Japanese abstracts of Chinese patents by using FI was added. The Gazette text search allows users to search Chinese patent documents by using texts and FI (only in limited fields of Chinese publications of unexamined patent applications issued in 2011 onwards).

(5) Front page searches for the publication of patent applications

Running a general search or entering document numbers enables access to the front pages of the publications of unexamined patent applications issued in January 1993 and thereafter.

(6) Patent classification searches

In October 2006, the conventional IPC searches and FI and/or F-term Retrieval were integrated and made available as a patent classification search service. Various patent/utility model gazettes published from 1885 onwards can be searched by using FI and F-terms as well as facet and IPC used within the JPO.

An English version of the FI and/or F-term search is also available.

(7) Patent map guidance

A list of reference is available for IPC, FI, F-term descriptions and F-terms. An English version is also available. Explanations of additional F-term codes have been available in the English version services since March 2004. In October 2011, an IPC-FI concordance search (a function to identify FI through IPC) function was added.

(8) Patent Abstracts of Japan (PAJ) Search (displayed in English)

English abstracts of publications of patent applications issued from 1976 onwards can be searched by keyword or document number. Also, since March 2000, the JPO has been providing the full texts (machine translation into English) of the Japanese Unexamined Patent Applications issued from January 1993 onwards.

(9) Examination document data search

Refer to 2.(2)a)

Search for the documents sent to the applicants by the JPO from July 2003 onwards has become possible by using document numbers as of March 2006. In addition, in March 2007, the documents subject to reference were expanded to include the documents sent by applicants and the documents used within the JPO.

Furthermore, the published appeal and trial decisions from 1940 onwards, and as related information, the status information (for those filed from 1990 onwards) on appeal and trial decisions, the legal status on applications, registrations and trial decisions are also available.

b) Providing JPO data

In March 1999, the JPO began providing the JPO's bibliographical and status information to external users by organizing and converting it into a standard format (Seiri-hyoujunka data) for better usability for external users. This service was transferred to the INPIT from October 2004, and has been provided to external users once every two weeks.

c) Reference to Official Gazettes on Patent

INPIT has 42 access devices, including those capable of conducting advanced searches, which is available in the Public gazettes reading room on the second floor of the JPO office building. This allows free public access to the IPDL Service, gazettes on CD-ROM/DVD-ROM, etc.

d) Reference to examination and trial documents

The INPIT is collecting various technical documents (books, etc.), which are used in the examinations and trials by the JPO, widely from within and outside Japan and is making them available to the public.

e) Provision of Licensable Patent Information

In order to ensure a smooth transfer of patents prepared for rights transfers or licensed implementation (licensable patents) within the industrial sector and between local companies and to promote their commercialization, the INPIT built a database of licensable patents owned by companies, universities and public research institutes, and made them available to the public on-line as the Patent Licensing Information Database.

The number of licensable patents registered in the Patent Licensing Information Database is estimated to be approximately 37,000 patents as of the end of March 2014.

<http://plidb.inpit.go.jp/PDDb/Service/PDDbService>

### **Legal status information (kind of information, coverage, medium, etc.)**

Legal status information of applications filed in January 1990 onwards can be searched on the IPDL by using the document number such as filing number, publication number and registration number. In addition, applications filed in 1989 and before can be searched if any data (e.g. publication of Gazettes, requests for examination, registration to establishment rights, requests for trials/appeals) was renewed in April 1998 onwards.

However, this service is available only on the Japanese IPDL at <http://www1.ipdl.inpit.go.jp/IPDL/keika.htm>

## **IV. ICT SUPPORT TO SERVICES AND ACTIVITIES RELATED TO PATENT INFORMATION CARRIED OUT BY THE OFFICE**

**Specific software tools supporting business procedures within the Office: general description, characteristics, advantages, possible improvements**

The JPO has been using an electronic application, file wrapper system and peripheral examination assistance system since 1990. These systems improve the efficiency of administrative works by computerizing application filing, formality/substantive examinations, dispatch, registration, gazette publications, and requesting for inspection of files, requesting for certification. The whole content of the application are stored in an electronic file, processed and managed. Currently, to improve the efficiency of drafting by linking the drafting system with the search systems and that of examination by implementing electronic approval, and for faster gazette publication and for the separate management of each application, the following subsystems are operating;

- (1) Electronic application system (software for clients for filing applications using the Internet)
- (2) Filing system (electronic application filing)
- (3) Record copy management system (management of bibliographic information, legal status information and actual document data)
- (4) Formality check system (automatic formality check, formality-check-related drafting, approval and time management, etc)
- (5) On-line dispatch system (on-line notification to applicants)
- (6) On-line viewing system (on-line request and viewing)
- (7) Examination-related administrative work system (substantive-examination-related drafting, approval and management, etc)
- (8) System for appeals and trials (appeals-and-trials-related drafting, approval and management, etc)
- (9) Registration clerical work system (registration to establishment rights, management of the original patent register, etc.)
- (10) Gazette system (publication and management of electronic gazettes)
- (11) File wrapper management system (management of information on storage of disposed file wrappers)

Owing to the introduction of these systems, an applicant can file a patent application or a utility model application via on-line from a personal computer. Moreover, a paperless system related to the appeal (including reconsideration by examiner before appeal) and to the domestic administrative procedures of a JPO-designated PCT international application has been put into place. In April 2004, the electronic filing of PCT international applications was launched.

In October 2005, in addition to the conventional electronic applications through ISDN lines, the acceptance of electronic applications utilizing the Internet, as well as 24 hours a day, 365 days a year full-time acceptance of all electronic applications was introduced. Furthermore, in January 2007, the PCT international application via the internet was introduced. Through the Internet application, not only high speed and high capacity communication using the currently widespread broadband has become possible, but also the exact authentication of personal identification and the prevention of a falsification of documents through the use of electronic certificates and communication security through the use of encryption methods have been achieved.

At the end of March 2009, the said electronic application through ISDN line was abolished to integrate it into the internet application.

In 2013, the ratios of on-line electronic filing was 98.2% for patent and utility model, 99.4% for appeals, 99.9% for the national procedures of a PCT internal application, and 95.9% for PCT international application.

Since January 2007, the INPIT has taken over the operation of the electronic application system, the gazette system and the file wrapper management system from the JPO.

## **Hardware used to supporting business processes of the Office**

)The hardware used

- 1) Central processing unit (overall management host): 1 set
- 2) Central processing unit (office processing host): 1 set
- 3) XML management server: 1 set
- 4) Record file server: 1 set
- 5) XML Official Gazette server: 1 set
- 6) PCT-RO server: 1 set
- 7) Server for paperless appeals and trials: 1 set
- 8) Acceptance server: 1 set
- 9) Server for exchange of priority certificates among Trilateral Patent Offices: 1set
- 10) Peripheral server for patent and utility model formality/examination: 1 set
- 11) Patent, utility model and design document server: 1 set
- 12) DNA search server: 1 set
- 13) Search server for examples of appeals and trials and court decisions: 1 set
- 14) Design search server: 1 set
- 15) Trademark basic master server: 1 set
- 16) Trademark pronunciation search server: 1 set

## **Internal databases: coverage, updates, interlinks with external sources**



a) Patent and Utility Model Search System (F-term search system)

In December 1999, a patent and utility model search system, based on a distributed computing system, was put into operation. This system integrated (clustered) not only the conventional F-term search system and a system to search computer-software related non-patent literature (CS literature), but also a foreign patent document search system using International Patent Classification (IPC) and patent classifications of overseas Offices such as Cooperative Patent Classification (CPC). Multiple search keys, such as F-term, FI, key word, CS term, IPC and CPC, can be inputted simultaneously; thus an examination environment, enabling a seamless search of various documents, such as domestic patents, foreign patents, non-patents, was created. This system enables referencing by linking patent family documents, citing documents, and cited documents. Furthermore, the text data of prior to laying-open specifications is stored and is available for search.

In addition, in January 2005, a terminal incorporating 2 screens, one ordinary resolution LCD for performing search work and one high-resolution LCD for displaying documents such as Patent Gazettes and the like, was introduced.

b) Patent and Utility Model Search System (Full-text search system)

A full text search in Japanese and English is also available by the use of text data of domestic patent gazettes collected through the paperless system and text data of foreign patent gazettes.

The full-text search system divides about 1TB of full text data into the input text by creating index with a document number including each string and an appearance position of string, and registers XML documents using the function the full-text retrieval engine (Accela BizSearch R4) has and realizes high-speed full text retrieval including different notation retrieval, neighborhood retrieval and Broad NOT retrieval function.

c) Search System for Appeal/Trial and Court Decisions (J-term search system)

Appeal/trial and court decisions are accumulated in the form of electronic data with a search index, called "J-term", and searching and screening for the appropriate appeal/trial and court decisions are conducted by using "J-term."

In addition, a full-text search service is available for appeal/trial and court decisions issued after January 2000.

d) DNA Search System

This is a system introduced in January 1998 for searching gene-related information, and enables a homology search, which searches for a sequence utilizing homology in respect of nucleotide sequences and amino acid sequences, and a keyword search, which utilizes bibliographic data.

**Establishment and maintenance of electronic search file: file building, updating, storage, documents from other offices included in the search file**

a) File building

a-1) F-term analysis

The search file is classified into about 2,600 themes (technical fields). At present, about 1,800 themes are analyzed by F-terms and can be used in search.

a-2) Making F-terms Available to the General Public

The JPO has made all the F-terms of the usable themes available to the general public via the Internet through the National Center for Industrial Property Information and Training (INPIT). The F-term is available to the general public and users can conduct the F-term search through the use of the Patent Map Guidance on the Industrial Property Digital Library (IPDL) of the INPIT.

b) Updating

Updating of the Search File

The search file used by the examiner is continuously renewed so that it is up-to-date. To the search files, Japanese patent documents (publication of patent applications, publication of registered utility model, etc.) are added in accordance with the JPO's internal classifications (FI) developed by subdividing the IPC.

c) Storage, including mass storage media

The search indices file used by the examiner is stored in an electronic form on RAID. In addition, document index information is stored on memory.

d) Documentation from other offices maintained and/or considered part of the available search file

The text data and the image data of the EPO, USPTO, WIPO, SIPO and KIPO, as well as the image data of major European countries are stored, and searches of CPC, IPC, etc. are possible.

**Administrative management electronic systems (register, legal status, statistics, and administrative support)**

Please refer to the subject mentioned above 4(1).

**V. PROMOTION ACTIVITIES AIMED TO SUPPORT USERS IN ACCESS AND EFFICIENT USE OF PATENT INFORMATION**

**Patent library: equipment, collection management, network of patent libraries in the country, cooperation with foreign patent libraries**

a) Operation of the JPO Library, collection and management of materials

a-1) Operation of the JPO Library

The JPO Library, as a branch library of the National Diet Library, is located on the first basement of the JPO office building, and is operated in the following manner.

1. Users

- JPO staff and general users

2. Open

- 9:30 to 18:00

a-2) Collection of materials

The following are collected: Materials concerning IP right legislation and the peripheral laws inside and outside of Japan, related materials necessary for understanding IP rights, related materials necessary for study of IP rights, and reference materials for general administration.

As of the end of 2013, the library contains 41,200 volumes.

a-3) Preservation methods of materials

The books are labeled and stored with a storage number and classification data, and the bibliographic information is inputted in the library system constructing a database for the books.

b) Interlibrary lending

Interlibrary lending of books etc. has been conducted among the National Diet Library and the branch libraries of each ministry and government offices.

Furthermore, the JPO is participating in the "Distributed Type Comprehensive Data System" which permits a batch data retrieval from the database of the books held by all the branch libraries by using the Kasumigaseki WAN (an inter ministry wide area network linking the LANs of each ministry and government offices (in-house Local Area Network)), which was constructed by the National Diet Library.

**Publications related to different business procedures and patent information sources available to users, for example, books, brochures, Internet publications, etc.**

Refer to [http://www.jpo.go.jp/tetuzuki\\_e/t\\_gaiyo\\_e/pa\\_right.htm](http://www.jpo.go.jp/tetuzuki_e/t_gaiyo_e/pa_right.htm) for the procedures for acquiring patent rights.

Refer to 3.(4) for information products available to external users.

**Office's initiatives on providing foreign patent information in the local language(s) (e.g., machine translation tools, translation of abstracts)**

The JPO prepares coded data of the Japanese abstracts of US patent specifications, the publication of US patent specifications, the publication of EPO patent specifications, the Chinese publication of unexamined patent applications and Chinese utility models. (However, Chinese utility models are translated by machine translation from English abstracts.) The data can be searched and displayed on the IPDL.

Currently, the JPO is developing a Chinese and Korean document translation/search system which is capable of searching and displaying machine translated full-text data of Chinese and Korean documents toward its launch in January 2015.

**Cooperation with universities, research centers, technology and innovation support centers, etc.**

Patent information is as important as journal information for researches conducted at universities, etc. In addition, patent information has a characteristic as public goods, since it is widely disclosed and contributes to the development of science and technology. The JPO has provided the IPDL Official Gazette Fixed-address Service since 2007 which allows users such as universities to directly access data contained in Gazettes on the IPDL with the aim of supporting R&D by universities.

**Education and training: training courses, e-learning modules (URLs), seminars, exhibitions, etc.**

a) IPDL training seminars

Training seminars of patent search using Industrial Property Digital Library (IPDL) were held for beginners of industrial property right search from individuals and SMEs (12 times in 9 major cities nationwide in FY2013). The second session and the first session of the seminar were held on weekends in Tokyo and Osaka, respectively, and on weekdays in other cities. IPDL has been managed at the National Center for Industrial Property Information and Training (INPIT) since October 2004 (Trainings have been held since FY2006)

b) Search expert training seminars

The INPIT held the following trainings.

- Training for Developing Searchers

The INPIT offers statutory training for those who wish to become "searchers" (staff that conduct the preparatory search business for prior art document searches outsourced by the JPO) in registered search organizations. (Article 37 of the Act on the Special Provisions to the Procedure, etc. Concerning Industrial Property Right) (four times a year).

- Search Expert Training (advanced level)

This seminar targets persons who have sufficient knowledge in the Patent Act and aims to develop experts who contribute to the rationalization of filing applications and making requests for examination by further improving their capabilities of conducting prior art searches (three times a year).

- Patent Search Practice Training

This seminar aims to develop human resources who can determine patentability based on the Examination Guidelines for Patents, which is required before a patent application is filed and after a patent has been acquired and a right is utilized, and accurately conduct patent searches in an efficient manner (once a year).

## **VI. INTERNATIONAL COOPERATION ACTIVITIES IN THE FIELD OF PATENT INFORMATION**

## **International exchange and sharing of patent information in machine-readable form, e.g., priority documents, bibliographic data, abstracts, search reports, full text information**

### **a) Trilateral data exchange and data exchange between two countries**

As part of its efforts for the Trilateral Offices' data exchange project, the JPO periodically provides the EPO and the USPTO with bibliographic data of patent/utility model gazettes stored in electronic media (such as DVD-R), concordance data of patent document numbers, Patent Abstracts of Japan (PAJ) data, F-term inventories, PMGS data, and IPC files. Under a bilateral data exchange program, the JPO provides the SIPO and KIPO, etc. with its data.

The JPO has received a variety of data from the EPO via HTTPS downloads and via the Internet. Incorporating the publication of unexamined applications bibliographic data provided by the JPO, the data includes the consolidated and edited bibliographic data of the publication of unexamined applications of each country, full text data and image data of laid-open patent application specifications, and the data of classifications, patent inventory and patent family.

The JPO receives from the USPTO, full text data and image data of patent application descriptions and those of laid-open patent application descriptions and the data of classifications etc., via downloads and via the Internet.

### **b) Trilateral exchange of DNA sequence data**

The JPO has sent the DNA sequence data published in the publications of patent applications, etc. (about 5,000 data in 2013) to the National Institute of Genetics, an intermediary for the trilateral data exchange.

### **c) Sending Official Gazette on DVD-ROM to overseas**

The JPO exchanges official gazettes, etc. with 59 organizations (including international organizations) in 54 nations, out of which the JPO sends DVD-ROM "Japanese Patent and Registered Utility Model Specifications" to 28 organizations. The JPO also sends DVD-ROM "Published unexamined Patent applications" to 26 organizations.

Those gazettes sent to the above countries and organizations include PAJ (Patent Abstracts of Japan), which has become a project of the INPIT since October 2004.

## **Participation in international or regional activities and projects related to patent information**

### **a) One-Portal Dossier**

In July 2013, the JPO launched the One Portal Dossier, a system to integrally acquire and display filing documents and examination documents (Dossier information) concerning a set of the patent family filed in several countries and regions. The JPO mutually exchanges Dossier information using this system with the EPO, the KIPO, the SIPO and the USPTO.

### **b) PI Policies**

The Meeting of IP5 Offices (EPO, JPO, KIPO, SIPO and USPTO) was held on June 5, 2013 in the United States. At this meeting, the IP5 Offices agreed on the policies prescribing the scope of and conditions for data on Patent Gazettes exchanged between the IP5 Offices. Specifically, the IP5 Offices agreed on 1) the basic principle that the patent offices shall provide patent information at marginal costs or for free and 2) the policies prescribing the scope of and conditions for use of data on Gazettes exchanged for free between patent offices, with respect to patent information such as data on Patent Gazettes subject to prior art searches conducted in the process of patent examinations.

### **c) Authority File**

The authority file is a list of publication numbers and dates of publication of Gazettes issued by each patent office.

External publication of the authority file was approved at the Meeting of IP5 Offices held in the Republic of Korea on June, 6, 2014. The IP5 Offices have been holding discussions for unifying its format.

## **Assistance to developing countries**

a) Assistance to developing countries through cooperation with WIPO

The JPO has been providing developing countries with search results free of charge in respect to the cooperation on the WIPO State-of-the-Art Searches Program. In 2013fy, the JPO provided 57 search results.

b) Activities/cooperation through voluntary contributions (Funds-in-Trust) for WIPO

(1) ASEAN IT Roadmap Workshop

In November 2013, a workshop was held in the Philippines for people who were in charge of IT of the ten ASEAN member countries with the aim of sharing information on the actual status of informatization of each Office, and measures taken in the field of IT by the IP5, the Vancouver Group (Australia, Canada and the United Kingdom) and the WIPO.

(2) Training for government officials

Training related to informatization was provided for two weeks in Japan under the cooperation with WIPO. The JPO invited trainees from 15 countries.

[http://www.training-jpo.go.jp/en/modules/pico2/index.php?content\\_id=7214](http://www.training-jpo.go.jp/en/modules/pico2/index.php?content_id=7214)

(3) WIPO Regional Training Workshop on IPAS for the African Member States

In October 2013, a workshop was held in Zimbabwe for several ARIPO-member countries and OAPI with the aim of improving the capabilities of IPAS focal points and understanding on IPAS, and sharing experiences in IPAS support and trouble shooting.

(4) Deployment of the IPAS Electronic Document Management System (EDMS) in selected Member States of ARIPO using the IPAS (in progress)

The EDMS has been installed in five African countries with the aim of providing on-line services in the future, building up skills for the establishment of logical infrastructure for preserving and managing scanned images, capture & digitization of front pages, and developing capabilities of utilizing IPAS to provide on-line services.

(5) Digitization project at the Ethiopian Intellectual Property Office (in progress)

IP-related files are being digitized at the Ethiopian Intellectual Property Office to simplify the procedures for granting industrial property rights and to achieve efficient IP administration.

(6) Capacity building for effective access to technical databases

The JPO supports effective use of technical information on the Internet by local users who live in developing countries by providing a basic infrastructure capable of Internet access and providing the staff with trainings at the Technology & Innovation Support Centers (TISCs). Specifically, the JPO held workshops and meetings in July and August 2013 in Tanzania, and in July 2013 in Zambia. Moreover, the JPO translated the WIPO tutorial on the use of patent information into French in connection with the TISCs.

c) Cooperation using other organizations for developing countries

(1) Sending experts

As of June 2014, the JPO sends one long-term expert to the Directorate General of Intellectual Property Rights (DGIPR) and the National Office of Intellectual Property of Vietnam (NOIP), respectively, under the JICA scheme.

(2) Japan-Singapore Partnership Programme for the 21st Century

In October 2013, the Japan International Cooperation Agency (JICA) and the Ministry of Foreign Affairs Singapore jointly held the training for middle and senior administrative officials who engage in the field of IP in Singapore for the purpose of sharing information on measures for disseminating and utilizing patent information. The JPO sent a lecturer and he gave discourses on the measures taken by the JPO.

(3) Training for government officials

The JPO offered a training program targeting patent examiners from developing countries, mainly those in the Asia-Pacific region, to improve their examination skills. The program covered examination practices and focused on how to make use of patent information.

\*For further information, visit the following JPO's website.

[http://www.jpo.go.jp/torikumi\\_e/kokusai\\_e/ipcoop\\_asia-pacific\\_e12.htm](http://www.jpo.go.jp/torikumi_e/kokusai_e/ipcoop_asia-pacific_e12.htm)

## VII. OTHER RELATED MATTERS

1.	Classification is allotting one or more classification symbols (e.g., IPC symbols) to a patent application, either before or during search and examination, which symbols are then published with the patent application.
2.	Preclassification is allotting an initial broad classification symbol (e.g., IPC class or subclass, or administrative unit) to a patent application, using human or automated means for internal administrative purposes (e.g., routing an application to the appropriate examiner). Usually preclassification is applied by the administration of an office.
3.	Reclassification is the reconsideration and usually the replacement of one or more previously allotted classification symbols to a patent document, following a revision and the entry into force of a new version of the Classification system (e.g., the IPC). The new symbols are available on patent databases.