

# CWS.ATR.PI.2011.CN

## Annual Technical Report 2011 on Patent Information Activities submitted by China (CWS /ATR/PI/2011/CN)

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. Evolution of patent activities

#### Changes experienced in terms of application filings and grants with respect to the previous year

In 2011, the State Intellectual Property Office (hereinafter SIPO) received 526,412 invention applications, a 34.6% increase compared to 2010, while inventions granted were 172,113, with a 27.4% increase. There were 585,467 utility model applications filed in 2011, a 42.9% increase compared to 2010, and utility models granted were 408,110 with a 18.5% increase.

#### Trends or areas experiencing rapid changes with respect to the previous year

##### Inventions

Among the technical fields (according to the definition of the International Patent Classification) in which the number of applications filed in 2011 exceeded 8,000, the following has experienced rapid changes compared to 2010:

The number of applications in Class B23 (Machine tools) was 8,415, a 43.9 increase.

The number of applications in Class H01 (Basic electric elements) was 33,896, a 42.3% increase.

The number of applications in Class A23 (Foods or foodstuffs; Their treatment) was 14,020, a 38.8% increase.

The number of applications in Class F16 (Engineering elements of units) was 10,365, a 31.5% increase.

##### Utility models

Among the technical fields (according to the definition of the International Patent Classification) in which the number of applications filed in 2011 exceeded 10,000, the following has experienced rapid changes compared to 2010:

The number of applications in Class A01 (Agriculture; Forestry; Animal husbandry; Fishery) was 14,092, a 70.5% increase.

The number of applications in Class B01 (Physical or chemical processes or apparatus) was 12,767, a 61.8% increase.

The number of applications in Class B23 (Machine tools) was 16,126, a 60.5% increase.

The number of applications in Class G01 (Measuring; Testing) was 27,988, a 58.9% increase.

The number of applications in Class F21 (Lighting) was 15,263, a 58.4% increase.

The number of applications in Class B65 (Conveying; Packing filamentary material) was 23,625, a 55.4% increase.

The number of applications in Class H01 (Basic electric elements) was 32,530, a 49.5% increase.

The number of applications in Class F16 (Engineering elements of units) was 26,092, a 48.2% increase.

The number of applications in Class E04 (Building) was 14,255, a 44.8% increase.

The number of applications in Class H04 (Electric communication technique) was 12,374, a 45.3% increase.

The number of applications in Class H02 (Generation; Conversion; Distribution of electric power) was 19,698, a 40.0% increase.

The number of applications in Class B60 (Vehicles in general) was 13,286, a 32.8% increase.

#### URLs of web pages of the Office's website that provide statistics related to patents

Chinese <http://www.sipo.gov.cn/tjxx/>;

English <http://english.sipo.gov.cn/statistics/>.

### II. Matters concerning the generation, reproduction, distribution and use of primary and secondary sources of patent information

#### Publishing, printing, copying (main types of publications of the Office in the field of patent information, etc.)

Nowadays, SIPO not only promotes the electronic publication of patent information on the Internet, but also keeps the traditional medium of paper.

#### Main types of announcements of the Office in the field of patent information

##### Patent gazettes

Patent gazettes for inventions and utility models are published in paper and TIFF formats once a week with the bibliographic data, abstracts and representing drawings, legal status, indexes, etc.

##### Patent specifications

Specifications of inventions published, granted and utility models granted are published together with patent gazettes once a week in TIFF formats, with claims, descriptions and drawings.

##### Patent certificates

The patent certificates for inventions, utility models and designs are issued periodically.

#### Mass storage media used (paper, microforms, optical storage, etc.)

The above-mentioned documents are stored in the medium of DVD and HDD.

## **Word processing and office automation**

The paper filings are scanned and converted into the electronic image data for subsequent procedures. The bibliographic data are manually collected twice, and then the two sets of data are compared automatically to find the differences so as to eliminate the clerical errors.

## **(New) techniques used for the generation of patent information (printing, recording, photocomposing, Optical Character Recognition (OCR), etc.)**

### **Patent gazettes**

By using electronic scanning and Optical Character Recognition (OCR) technologies in the data processing, the documents of patent gazettes in TIFF format edited and typesetted are published in paper, optical disks and on the Internet.

### **Patent specification**

Image files in TIFF format are generated by scanning, and after content selection and layout design the files are printed into pamphlets of specifications by using digital printing equipments and accessible on the Internet.

## **URLs of web pages of the Office's website that provide access to online publication of patent documents and gazettes, and to other primary and secondary sources of patent information, including patent publication servers and download of bulk patent data**

### **Chinese**

Patent gazette <http://www.sipo.gov.cn/zwgs/zlgb/>

Patent search <http://www.sipo.gov.cn/zljs/>

### **English**

Patent Search

[http://59.151.93.237/sipo\\_EN/search/tabSearch.do?method=init](http://59.151.93.237/sipo_EN/search/tabSearch.do?method=init)

## **III. Matters concerning abstracting, classifying, reclassifying and indexing of technical information contained in patent documents**

### **Abstracting, reviewing, translating**

SIPO provides translation service from Chinese to English. In 2011 SIPO continued translating Chinese patent abstracts, titles, applicants and inventors. SIPO also continued efforts of optimizing translation engine for the Chinese-English Machine Translation System, as well as adding technical terms, resulting in further improvement on the translation quality of the system.

### **Classification<sup>1</sup>, preclassification<sup>2</sup> (if applicable), and reclassification<sup>3</sup> activities; Classification system used, e.g., International Patent Classification (IPC), other classification (please indicate whether or not patent documents are classified by your Office and, if so, which classification is used)**

During 2011, 918,766 new applications were classified according to the International Patent Classification.

About 14,500 documents were reclassified due to the entry into force of the version of the IPC (2011.01).

### **Coordinate indexing (domestic deep indexing systems, keyword indexing)**

Titles, abstracts and main claims of inventions published, granted and utility models granted are indexed with keywords

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Titles, abstracts and main claims of inventions published, granted and utility models granted are indexed with keywords

### **Hybrid system indexing**

No activities.

### **Bibliographic data and full-text processing**

According to the "China Patent Data Element Standard" based on WIPO standard ST.36, the data processed by SIPO includes inventions published, granted and utility models granted.

## **IV. Search file establishment and upkeep**

### **File building**

The full image data of inventions published, granted and utility models granted since 1985, as well as the bibliographic data, abstracts and main claims are added to the search file.

### **Updating**

The data is updated every two weeks.

### **Storage, including mass storage media**

Except that EPOQUE system uses an independent magnetic disk array, all the other search files are stored in uniform magnetic disk arrays and backed up with magnetic tapes.

## **Documentation from other offices maintained and/or considered part of the available search file**

Via data exchange and purchase, SIPO collects patent documentations from multiple countries, regions and international organizations, and adds the data in the search file.

## **V. Activities in the field of computerized and other mechanized search systems**

### **In-house systems (online/offline)**

Following search systems are provided by SIPO:

#### **CPRS**

By using a dedicated client application, examiners of SIPO can access CPRS from the desktops. The system contains the Chinese patents since 1985, and provides the search entries of the bibliographic data, abstracts, claims and keywords, via which examiners can retrieve the full image data of the patents. Besides, the system also incorporates the patent documents from US, JP, EP and WO, and its full image data can be retrievable by publication number.

#### **EPOQUE**

EPOQUE can be accessed by a dedicated client application from the desktops, which has become the main foreign documentations search system used by examiners.

#### **S system**

S system is a patent search and service system for use of examiners, providing search function of patent documentation from SIPO and other Offices.

### **External databases**

SIPO's examiners can access the NPL databases including STN, ISI Web of Knowledge, Elsevier Science Direct, IEEE/IEE Electronic Library.

### **Administrative management systems (e.g., register, legal status, statistics and administrative support)**

#### **E system**

The Electronic Examination System (E system), which was officially put into practice on 10 February 2010, is a system covering whole procedure of patent document examination based on codified document and has integrated the functions of patent filing, flow management, examination, publishing, reexamination, invalidation, inquiring, supervising and statistics. The ratio of electronic filing of Dec. 2011 reached 77.8%.

### **Equipment used (hardware, including the types of terminal and network used, and software), carriers used**

Examiners can access the Intranet with 10Gbps core switch and 100Mbps link to desktops for the network resources.

### **Existing online thesauri; their structure, presentation and usefulness for computerized searches**

No activities.

## **VI. Administration of the industrial property office library, and information products and services available to the public (relating to facilities, e.g., for lodging applications, for assisting clients on searching procedures, for obtaining official publications and registry extracts)**

### **Planning, administration, automation, security, buildings**

#### **Patent Documentation Library**

Patent Documentation Library offers documents reading, inquiry, search, replication and training services and is equipped with 60 computers for the public to access SIPO's intranet and Internet information resources.

#### **Intellectual Property Library**

The Intellectual Property Library collects domestic and international intellectual property books, journals and electronic publications.

#### **Science and Technology Library**

The Science and Technology Library collects domestic and international technical books, journals and electronic publications commonly used in the patent examination.

### **Collecting, acquisitions, preparation**

Currently SIPO collects patent data, non-patent literature, domestic and international books and journals via data exchange and purchase.

### **Collection management, preservation**

Books are preserved with the storage number and classifications, which are put on shelves; electric data are preserved in optical discs, hard discs or servers.

### **Interlibrary lending, resource sharing, networks of patent libraries in the country**

No activities.

### **Information services available to the public (including computerized services and search files contained in libraries remote from your Office and patent information posted by your Office on the World Wide Web)**

The public service provided by SIPO includes:

Call center

The center offers information consultation to the public free of charge by face-to-face, telephone, online and mail.

Official website

The official website of SIPO offers search and inquiry services in both Chinese and English. Over 5.2million records of Chinese patent data since 1985(including inventions, utility models) and Chinese to English machine translation service are made available to the general public. In 2011, the official website of SIPO received 3.89 billion hits in total.

Patent search and service system (for the public)

In April 2011, SIPO launched patent search and service system (for the public), providing search and analysis function of patent documentation of SIPO and other Offices.

Local Patent Information Center

SIPO has set up 47 local patent information centers across the country and provided them with patent data. These centers provide search and inquiry services for the public.

Local Patent Receiving Offices

SIPO has set up Local Patent Receiving Offices in 26 cities all over the country in order to accept patent filings and provide inquiry service for the public.

## **URLs of web pages of the Office's website for electronic filing of patent applications**

SIPO provides the following website for the online filing: <http://www.cponline.gov.cn/>.

## **URLs of web pages of the Office's website that provide information on business procedures such as: filing, publication, examination and grant procedures related to patents; opposition and appeal procedures related to patents; etc.**

Chinese: <http://www.sipo.gov.cn/zlsqzn/sqq/>;

English: [http://www.sipo.gov.cn/sipo\\_English/about/examinationAffairs/200804/t20080416\\_380173.htm](http://www.sipo.gov.cn/sipo_English/about/examinationAffairs/200804/t20080416_380173.htm)

[http://www.sipo.gov.cn/sipo\\_English/about/examinationAffairs/200804/t20080416\\_380170.htm](http://www.sipo.gov.cn/sipo_English/about/examinationAffairs/200804/t20080416_380170.htm).

## **URLs of web pages of the Office's website that provide a description of information products and services offered by the Office (e.g., patent search service(s) and patent databases), as well as information on how to access and utilize them**

Information Products

"China Patent Specification" optical disk collects the specifications of inventions and utility models since 1985.

"China Patent Abstract Databases" optical disk collects over 5.2 million pieces of patents information (including inventions, utility models) since 1985. The information of each piece includes the inventor, publication date, priority, legal status, abstract, and main claim, etc.

"China Patent English Abstract Databases" optical disk, "ABSDAT(C)", collects published inventions and granted utility models since 1985, containing bibliographic data and abstracts in English.

"China Patent gazette" optical disk provides the weekly gazettes information see <http://www.sipo.gov.cn/zwgs/zlgb/>

[http://www.sipo.gov.cn/xxcp/zwxgp/200804/t20080407\\_370310.html](http://www.sipo.gov.cn/xxcp/zwxgp/200804/t20080407_370310.html)

"Chinese Patent Bibliographic Data and Abstracts Databases" optical disk, i.e. "CNPATE/ACCESS", which collects published inventions and granted utility models since 1985, containing bibliographic data and abstracts (only for inventions) in English.

Search services

SIPO offers the following search systems on its official website:

Patent search, provides the bibliographic data, abstracts and specifications of Chinese patent information including inventions, utility models since 1985.

<http://www.sipo.gov.cn/zljs/> (Chinese) and

[http://59.151.93.237/sipo\\_EN/search/tabSearch.do?method=init](http://59.151.93.237/sipo_EN/search/tabSearch.do?method=init) (English)

Patent search and service system (for the public)

In April 2011, SIPO launched patent search and service system (for the public), providing search and analysis function of patent documentation of SIPO and other Offices.

[www.pss-system.gov.cn](http://www.pss-system.gov.cn)

## **VII. Matters concerning mutual exchange of patent documentation and information**

### **International or regional cooperation in the exchange of machine-readable information, e.g., bibliographic data, abstract and/or full text information**

In 2011, SIPO has collected patent specifications in the medium of CD or DVD from 10 patent authorities, and patent gazettes or abstracts in the medium of CD or DVD from 20 authorities.

In the mean time, SIPO has sent patent specifications to 21 authorities, delivered official gazettes to 12 authorities, and posted Chinese patent English abstracts to 42 authorities in the medium of DVD.

### **Medium used for exchange of priority documents**

Since May 2006, SIPO has begun to transmit the priority documents to WIPO through EDI, and has received the priority documents from WIPO in optical disks.

### **Medium allowed for filing applications**

The applications can be filed in both paper and electronic form.

## **VIII. Other relevant matters concerning education and training in, and promotion of, the use of patent information, including technical assistance to developing countries (please indicate URLs of web pages of the Office's website wherever appropriate)**

## **Training courses for national and foreign participants, use of audiovisual means**

In 2011, 119 training seminars were held, benefiting 44,000 trainees.

In 2011, SIPO added five more long distance learning courses, and released 49 courses on line in total. SIPO also designed nearly 100 courses for 30,000 trainees.

In 2011, SIPO built ten more sub sites of distance learning.

In 2011, SIPO held 25 international training, seminars and lectures. 1261 people attended the activities.

## **Assistance to developing countries (sending consultants and experts, receiving trainees from developing countries, etc.)**

No activities.

## **Promotional activities (seminars, exhibitions, visits, advertising, etc.)**

No activities.

## **Studies to identify trends in new technology, e.g., by the use of patent statistics and preparation of monographs**

In 2011, SIPO developed academic researches in many technological fields, including:

1. Patented technology status and development trend of marine antifouling paints.
2. Patented technology status and development trend of intravascular stent.
3. Patented technology status and development trend of the positive materials of lithium battery.
4. Patented technology status and development trend of channel coding.
5. Patented technology status and development trend of endoscope.
6. Patented technology status and development trend of 3D-display.
7. Patented technology status and development trend of RNA interference.
8. Patented technology status and development trend of the materials of medium & high voltage cable
9. Patented technology status and development trend of high-rise building fire escape and rescue.
10. Patented technology status and development trend of high - speed mechanical seal.
11. Patented technology status and development trend of spray printing.
12. Patented technology status and development trend of LTE.
13. Patented technology status and development trend of prevention and treatment of hepatitis drug.
14. Patented technology status and development trend of liposome.

## **Assistance furnished by offices to facilitate the changing over of receiving offices to electronic data carriers for the exchange of patent documents (see also fourth sub-item of item VI, above)**

SIPO has set up a FTP server for updating front files.

## **IX. Other general information related to the Office that is available on the Internet -- URLs of web pages of the Office's website that:**

### **provide information on legislation related to patents**

Chinese <http://www.sipo.gov.cn/zcfg/>

English [http:// english.sipo.gov.cn/laws/](http://english.sipo.gov.cn/laws/)

### **contain the Annual Report of the Office**

Chinese <http://www.sipo.gov.cn/gk/>

English [http:// english.sipo.gov.cn/laws/](http://english.sipo.gov.cn/laws/)

### **if necessary, provide further information related to the topics referred to in the current ATR**

Chinese <http://www.sipo.gov.cn>

English <http://english.sipo.gov.cn/>

### **provide open source codes related to patent information systems**

No activities.

### **contain patent-related news regarding the Office**

Chinese <http://www.sipo.gov.cn/>

English <http://english.sipo.gov.cn/news/>

## **X. Other relevant 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.