



## V. Information Technology and Documentation

### **1** Information Technology

*The Information Technology Plan of SIPO under the 13<sup>th</sup> Five Year Plan was formulated. SIPO established the Chinese Patent Receiving and Preliminary Examination System, incorporating new features such as online interactive electronic application and treatment on the basis of the offline client application. The system effectively raised the quality of application, agency and examination and strengthened the capacity of SIPO as a governmental agency to provide readily accessible services to the public. SIPO established the new generation of search system for regional patent information service centers and completed the first batch of pilot projects, and continued to expand the scope of basic patent data provided to the public free of charge.*

#### (1) IT Development

SIPO steadily improve the effectiveness of its IT works to support the rapid



development of examination works in all aspects. The hardware used for the electronic application system within the Chinese Electronic Patent Examination System to improve service capacity in relation to patent application. Patent annuity reduction was extended from 3 years to 6 years, providing convenience to patent holders. The functionalities of the Patent Search and Service System was further improved, data for search was continuously expanded and the average response time of key operational pages related to patent search is increased by 1.8 times. An emergency backup system for the Chinese Examination and Flow Management System for PCT Applications at the International Phase was launched, making it possible for the system to receive electronic PCT applications without any interruption.

SIPO continued to enhance support in relation to IT resources. It drafted *the Standard for Electronic Documents on Nucleotide and/or Amino Acid Sequences*, and completed the research on the standard for codification of 11 types of notification documents related to patent examination, laying a solid foundation for increasing the effectiveness of patent examination data utilization. SIPO's software legalization work was recognized by the State Council in its inspection on software legalization. SIPO also completed the IT development in the transitional period of the Patent Examination Cooperation Tianjin Center and Sichuan Center.

## (2) Patent Information Services to the Public

Pertinent patent information services were provided. SIPO organized the “Work Conference on Building a National Patent Information Public Service System” and formulated the work objectives in the new period. In October 2016, SIPO signed a patent data utilization agreement with the State Administration of Science, Technology and Industry for National Defense, and continued to provide data support to regional patent information service centers. On the basis of continued patent information service to the government, key sectors and industries in their respective regions, the regional patent information service centers further improved and developed works of regional characteristics, such as high-end patent information services, and extended the scope of service to the prefectures, counties and industrial parks affiliated to their respective regions. SIPO made efforts to continuously improve the service capacity of regional patent information service centers and held the “Training Workshop on Patent Information Databases for All Technical Fields and Patent Information Utilization and Services” to enhance their capacity to use the system. SIPO carried out the first batch of test on the “New Generation Search and Analysis System for Regional Patent Information Service Center” in the Patent Information Service Center of Shandong Province and the Patent Information Service Center of Jinan City, which benefited 93 enterprises and public institutions. 34 more regional centers were included in the next batch of entities participating in the test on the system, and the scope of the benefits will further expand. The quality of publicly available basic patent information was steadily improved. The Experimental System on Patent Data Services provided to the public full-text data, bibliographic data and full-image data complying with relevant Chinese standards.

The patent service platform became more inclusive and the improvement of service capacity was rapidly enhanced. SIPO completed IT development in 5 new fast-track rights assertion centers and supported patent receiving offices to carry out fast-track rights assertion services by optimizing their operation flow. The Patent Affairs Service System – the first mobile app developed by SIPO – was launched to provide services such as recordation for certification of patent-

related fees reduction and request for copies of documents. The user interface and data sources for the Patent Search and Analysis System were upgraded and launched a Wechat public platform and make available patent registrar search and download services. SIPO also pushed forward the development of the comprehensive service platform for patent information dissemination and utilization, which integrated functionalities such as training, lectures, research and exchanges on patent information.

### (3) International Cooperation on IT

SIPO continued to deepen international cooperation in the IT area and carried out data exchange with 26 countries, regions and organizations to comply with the need of patent examination and public service. SIPO carried out in-depth bilateral and multilateral exchanges with 21 countries, regions and organizations (9 of which were new cooperation partners to conduct exchanges in the IT area and 6 were countries along the “Belt and Road”). SIPO steadily pressed ahead with the legal status project under the IP5 Global Dossier initiative and the priority exchange project under the ID5 cooperation. SIPO consolidated its strategic partnership with the European Patent Office. The number of official users of Cloud Patent Examination System was expanded to 3 (new users: Peru and Saudi Arabia) and trial users increased to 39 countries and regions (11 new users). SIPO also provided advanced user accounts of the Patent Search and Analysis System to 23 countries and regions (5 new users).

## **2** Documentation

### (1) Documentation Resources

Throughout the year, SIPO allocated 162 types of documentation resources, including 8 types of patent resources and 154 types of non-patent resources, providing solid support for patent examination, patent information public services, macro-management and research. SIPO maintained bilateral

exchange of patent documentation with 37 countries, regions or organizations and provided Chinese patent documentation to 7 PCT International Search Authorities and International Preliminary Examination Authorities.

By the end of 2016, SIPO had had over 523 types of patent documentation resources, including 184 types of bibliographic items, 165 types of full-image data, 82 types of full-text data, 12 types of thematic data, 70 types of search-supporting data and 21 types of other data. The bibliographic data covers 104 countries, regions or organizations, the full-image data covers 102 countries, regions or organizations, the full-text data covers 35 countries, regions or organizations. SIPO currently has more than 18 million pieces of Chinese patent documentation.

The quality inspection on data processing was accredited by the ISO 9001 quality management system. SIPO had applied quality management system in the whole process of data quality management.

## (2) Documentation Services

Based on the needs of the examination process, SIPO continued to offer quality and efficient services on documentation extraction and consultation, carried out knowledge-based services for patent examination and provided relevant technical information on green chemistry and new energy to the examination departments. SIPO prepared and published *the Guidelines for Searching Patent Documentation Codes of Countries/Regions in the World* which covered 71 countries and regions. SIPO enhanced the management of and training on database use and organized 19 training workshops non-patent database of various types and trained a total of 4100 people. It also completed the upgrade of the intellectual property documentation database.

SIPO deepened the service model of “Internet Plus Patent Documentation” and made available multi-layered, open and characteristic services. SIPO used its official website, the “Patent Documentation Sharing” Wechat public platform, Wechat groups and email to push relevant knowledge, information

on patent documentation and provide services such as online consultation and documentation transmission. According to the diversified needs of different social groups, SIPO organized thematic public lectures on heated IP issues, IP awareness building, patent documentation knowledge and information utilization skills, etc. Throughout the year, SIPO organized 43 sessions of open lectures covering 11 themes and training 6,600 people, representing a year-on-year growth of 74%. The number of provinces/autonomous regions/municipalities/cities above sub-provincial level participating in online open lecture sessions was expanded from 15 in 2015 to 47 in 2016. The IP exhibition received 1506 domestic and foreign group visitors in 34 batches. The IP Library of the Patent Documentation Department was recognized as a “National Outstanding Unit for Popularization of Science” by the Ministry of Science and Technology, the Publicity Department of the CPC Central Committee and the China Association for Science and Technology.

### (3) Classification and Relevant Research

For the first time in SIPO’s history, CPC and IPC classifications were carried out simultaneously on documentation of new invention patent filings. In 2016, SIPO facilitated the establishment of 7 proposals on revising the IPC system at WIPO, and assisted the adoption of one of the proposals. SIPO provided 237,000 pieces of re-classified data to WIPO and fulfilled its international obligations. SIPO enhanced the development and utilization of management system for standards on patent documentation and information and completed the studies on the national stand of “IP Documentation and Information Classification and Codes”. SIPO carried out a number of research projects including the research on policies of world’s major countries, regions and organizations on patent information, providing comprehensive support to the development of documentation-related works.

### (4) Publications on Documentation

Throughout 2016, SIPO published a total of 2,622,499 pieces of documentation, including 955,342 pieces on patent publication, 333,153 on patent granting,

859,925 pieces on utility model, and 474,079 pieces on industrial design. SIPO promoted the outcomes of documentation-related research through publication. For example, SIPO published *the Patent Documentation Research 2016* (open publication), 6 issues of *the Patent Documentations Research* (internal publication), 2 special issues on patent technology introduction, 5 issues of *the Supplement to Patent Documentation Research*, 20 issues of *the Foreign Intellectual Property News* and 6 issues of *the Special Edition of Foreign Intellectual Property News*.

### (5) Dissemination and Utilization of Patent Information

SIPO deepened guidance to nationwide patent information dissemination and utilization works. It compiled and distributed *the White Paper on Patent Information Dissemination and Utilization in China in 2015*. *The Work Plan on Nationwide Patent Information Dissemination and Utilization in 2016* was released and implemented. The revision of *the Patent Documentation Information Service Guidance (2016)* was completed.

SIPO promoted further improvement of the patent information dissemination and utilization system. Vertically, it continuously carried out system construction and capacity building in 12 patent information dissemination and utilization bases and facilitated the further expansion of patent information dissemination and utilization to districts, counties and industrial parks and newly established more than 40 work stations. It carried out pilot program to foster patent information dissemination and utilization in Hubei and other two provinces and continued to provide assistance in relation to patent information to 7 provinces and autonomous regions in the west part of the country. Horizontally, it explored the establishment of a cross-regional horizontal system for patent information dissemination and utilization based on industrial sectors. SIPO signed a MOU on cooperation in patent information with the National Science Library of the Chinese Academy of Sciences and carried out research on patent technology review and contributed the outcomes to technological innovation. It carried out pilot programs on fostering sectorial capacity building in collaboration with three industrial associations including the China Petroleum and Chemical

Industry Federation. A three-dimensional patent information dissemination and utilization system took shape.

SIPO promoted the integration of patent information work into the construction of an IP Powerhouse. It carried out pilot programs in Beijing, Tianjin and Shanghai on facilitating innovation and entrepreneurship with patent information, on patent information screening and pushing and on patent information utilization capacity building of enterprises. It continued to carry out studies on global patent-related innovation activities, and carried out research on patent competitiveness intelligence on “Anti-smog equipment”, “Wearable electronic devices” and “power system for high-speed railway locomotives”.

The human resources for patent information dissemination and utilization were further developed. A three-layered patent information talent pyramid was formed as 105 leading talents, 296 patent information trainers and 605 experts in practical work on patent information. SIPO organized 1 advanced national training session on patent information, and 7 training sessions on facilitating innovation capacity building through patent information, and 6 training sessions on guidance to patent information utilization in the building of corporate IP strength.

## (6) International Exchanges and Cooperation on Patent Documentation

SIPO organized the 15<sup>th</sup> meeting of the 1<sup>st</sup> Working Group of the IP5 (EPO, JPO, KIPO, SIPO and USPTO) cooperation and promoted further revisions to and improvement of the policy documents on IP5 cooperation in classification. With SIPO’s facilitation, 6 revision proposals became IP5 revision items. SIPO renewed the MOU with the EPO on cooperation in classification. It organized the 9<sup>th</sup> and 10<sup>th</sup> meetings of the SIPO-EPO Joint Working Group on Implementing the Cooperative Patent Classification. It organized two groups to the EPO for training on classification and provided to the EPO 251,000 pieces of Chinese patent documentations classified with the CPC system.