



## V. Information Technology and Documentation

### **1** Information Technology

*The Information Technology Plan of SIPO under the 13<sup>th</sup> Five-Year Plan was published. SIPO accelerated IT development of IP protection centers and the fast-track rights assertion centers. The Office steadily carried out the pilot program on the “New Generation Search and Analysis System for Regional Patent Information Service Center” to enhance its public patent information service capabilities.*

#### (1) IT Development

SIPO optimized its core systems and explored for the application of new technologies such as big data and AI in patent examination to help improve patent quality. The basic environment of the Chinese Electronic Patent Examination System was upgraded and restructured to improve support to patent examination; the publication procedure was further improved and the



frequency of publication was increased to twice a week; external feedback regarding the applications were provided to the examiners. SIPO completed basic improvement on the application of standard data format and supplement of system data on the Patent Search and Service System. It newly added the automatic search function and automatic record-making for invention search information and further improved the efficiency of search and the quality of search reports. The China Patent Receiving and Preliminary Examination System was functioning in a stable manner to continuously improve the accuracy and efficiency of examination. The 3<sup>rd</sup> phase image search engine of the Chinese Industrial Design Smart Search System was upgraded to effectively improve the capacity of image searching capabilities. The quality of data being transmitted between SIPO and the international bureau was improved for the CEPCT System to raise the efficiency and accuracy of flow management in the international phase of PCT applications.

Effective IT support to SIPO's work. SIPO altered its relevant systems and effectuated support to the new national standard on patent fees effective as of 1 July, 2017. In accordance with the requirements of the State Council set forth in *the Guiding Opinions of the State Council on Accelerating Internet+ Government Services*, SIPO launched the initiative to integrated government information systems and completed a thorough study and analysis and devised a draft plan. SIPO pressed ahead with the development of a monitoring and alarming and emergency reporting system and made available security monitoring

services covering all websites and service systems of SIPO and improved the emergency response and handling capabilities for web security events. SIPO was awarded as an Outstanding Unit in National Internet and Information Security Information Reporting in 2017. The Office amended the industrial standard – *Standard for Nucleic Acid Sequence and Amino Acid Sequence and Their Electronic Files (ZC 0003-2001)*.

## (2) Patent Information Services to the Public

SIPO took multiple measures to improve patent information public service capabilities. The mid-term reporting mechanism of SIPO patent information service (regional) centers was established to enhance their capabilities to carry out services. SIPO steadily carried out the pilot program on the “New Generation Search and Analysis System for Regional Patent Information Service Center” and organized a training workshop on the system in Chengdu in June. SIPO completed the installment of the system in 15 pilot centers and facilitated the upgrading of their service capabilities. The test system on patent data services functioned stably. The Office continued to promote the sharing of patent data resources. The Office improved the Chinese and Foreign Examination Information Search System and made available to the public the dossier information reminder function in May.

SIPO made use of IT technology to provide supports for establishing the IP protection center, for example, to update the related IT systems to improve the efficiency of the IP protection center, to streamline the existing Design examination process and shorten the period of design cases examination, to expand the covering cities of all IP protection centers.

## **2** Documentation

### (1) Documentation Resources

Throughout the year, SIPO allocated 162 types of documentation resources, including 9 types of patent resources and 153 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 34 countries, regions or organizations and provided Chinese patent documentation to 7 PCT International Search Authorities and International Preliminary Examination Authorities.

By the end of 2017, SIPO had had over 539 types of patent documentation resources, including 191 types of bibliographic items, 166 types of full-image data, 83 types of full-text data, 18 types of thematic data, 72 types of search-supporting data and 20 types of other data. The bibliographic data covers 104 countries, regions or organizations; the full-image data covers 103 countries, regions or organizations; the full-text data covers 36 countries, regions or organizations. SIPO currently has more than 113 million pieces of Chinese patent documentation.

The quality inspection on data processing was accredited by the ISO 9001 quality management system.

## (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, new energy, smart manufacturing, Internet of Energy to the examination departments. SIPO prepared and published *the STN Search Cases* and promoted in-depth study and utilization of the STN platform. The Office organized 19 training workshops on non-patent database of various types and trained a total of 2,400 people.

SIPO deepened the service model of “Internet+ 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 and 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 19 topical issues such as patent quality improvement, IP utilization and protection, start-up business and employment of university graduates. Throughout the year, SIPO organized 79 sessions of open lectures, 5 sessions of advanced IP lectures and 2 lectures for middle and primary school education. The combined number was twice of that of 2016. A total of 29,854 people were trained, 4.5 times of that of 2016. The number of provinces/autonomous regions/ municipalities/cities above sub-provincial level participating in online open lecture sessions was expanded from 38 in 2016 to 47 in 2017. The IP exhibition received 1,502 domestic and foreign group visitors in 37 batches.

### (3) Classification and Relevant Research

SIPO carried out classification of new patent application documents according to both the CPC and the IPC systems. In 2017, SIPO classified a total of 3.035 million pieces of documents, of which 1.228 million were invention patent documents and 1.523 million were utility model documents. The reclassification volume under the IPC system was 238,000, and that under the CPC system was 46,000. SIPO organized the translation and update of the classification table and ensured effectiveness of classification results. The Office promoted the alteration of the Patent Search and Analysis System and made available to the public data classified under the CPC.

### (4) Publications on Documentation

Throughout 2017, SIPO published a total of 3,106,797 pieces of documentation, including 1,270,363 pieces on invention patent publication, 420,144 on invention patent granting, 973,294 pieces on utility model, and 442,996 pieces on industrial design. SIPO promoted the outcomes of documentation-related research through publication platforms. It published *the Patent Documentation Research 2017* (open publication), 6 issues of *the Patent Documentations Research* (internal publication), and 4 supplement issues of *the Patent Documentation Research*. The Office also translated and published 19

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 work. It organized the Meeting on National Patent Information Dissemination and Utilization 2017, compiled and distributed *the White Paper on Patent Information Dissemination and Utilization in China 2016*. SIPO published and implemented *the Work Plan for National Patent Information Dissemination and Utilization 2017* and realized concentrated guidance and nurturing of bases and talents. It established a documentation resources directory covering the Patent Office of SIPO and the provincial IP administrations, containing the catalogue information on documentation resources directory in 41 departments and affiliates under SIPO (including patent examination centers) and 31 provincial IP offices.

SIPO promoted the integration of patent information work into the construction of an IP Powerhouse. In 2017, it recognized 120 patent documentation service outlets and realized full coverage of patent documentation service network and established a network providing basic services such as patent documentation support, patent information consultation and public education. By developing characteristic bases and the capacity of patent documentation service outlets, the service capabilities of the bases and the outlets were enhanced. The project covered 16 provinces, autonomous regions and municipalities.

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 941 experts in practical work on patent information. The Office implemented 10 projects aiming at enabling the leading talents and trainers to play their role. SIPO organized 7 training sessions on practical skills for 7 provinces including Qinghai and Gansu.