# **Current Intellectual Property Information Services** in College Libraries and Development Strategies

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#### **ABSTRACT**

Intellectual property information services are an important part of information services in college libraries. At present, they show a trend of sound development, although they are still under practical exploration. In this study, the author conducted an in-depth analysis of current intellectual property information services in college libraries, identified existing problems and proposed development strategies for such services in higher education institutions to develop better service patterns in college libraries and further promote the development of a 'double world-class project' in higher education institutions.

Keywords: Intellectual property right, College library, Information service.

### 1. INTRODUCTION

Intellectual property rights refer to the ownership of the products of intellectual work, mainly authors' rights with copyright and industrial property rights with patent and trademark rights as the main content. [1] Intellectual property services include activities such as agency business, transfer, registration, evaluation, certification, counselling and retrieval of copyrights, patents and trademarks. College libraries are an important part of the national intellectual property information service system. In December 2017, the China National Intellectual Property Administration (CNIPA) and the Ministry of Education (MOE) jointly developed Measures for Implementing the Construction of Intellectual Property Information Service Centers in Higher Education Institutions (No. 62 [2017] of the General Office of the CNIPA), encouraging higher education institutions to set up intellectual property information service centres autonomously and recommending that the centres should be affiliated with college libraries. [2] In 2019-2020, the General Office of CNIPA and the General Office of MOE announced 60 intellectual property information service centres in two successive batches, all affiliated with college libraries. The third batch in 2021 was under selection. [3] [4] College libraries have become an important part of

the national intellectual property information service system.

First, it is necessary to understand the specific content of intellectual property information services in college libraries. The Measures for Implementing Construction of Intellectual Information Service Centers in Higher Education Institutions (Amendment), issued by the General Office of CNIPA and the General Office of MOE in June 2021, categorises the work carried out by intellectual property information service centres in higher education institutions into five major categories: (a) conducting basic work, supporting scientific research and innovation, (c) fostering professional talent, (d) serving the economy and society and (e) establishing a coordination mechanism. [5]

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# 2. THE STATUS QUO AND DEFICIENCIES OF INTELLECTUAL PROPERTY INFORMATION SERVICES IN COLLEGE LIBRARIES IN CHINA AND PRESENTS DEVELOPMENT STRATEGIES AND CORRESPONDING SERVICE PATTERNS

The number of published research papers on intellectual property information services in Chinese college libraries has been increasing each year. From 1988 to 2009, the number fluctuated repeatedly by 0-9, rising or dropping slightly. In 2010, it reached 13, exceeding the single-digit number for the first time. From 2011 to 2017, the fluctuation continued. From 2018 to 2019, the number of papers published annually increased from 19 to 36. In 2020, the annual number was up to 42, but down to 36 by September 2021. At present, the world is experiencing 'profound changes unseen in a century'. In China, the strategy of innovation-driven development is being implemented to create a situation of independent innovation, especially in key technologies. This sets high and urgent requirements for the development of intellectual property rights. [6] Contextually, some college libraries with a foundation have actively set up intellectual property service centres in response to the national intellectual property policy. The construction of intellectual property information service centres in college libraries has begun to shift from its initial scattered and unordered state to a systematic and standardised state. Most of the intellectual property centres in college libraries are in an intense period of preparation, enabling college libraries to provide property information intellectual services efficiently and in an orderly fashion, to further improve the innovation and creativity of librarians and update their conceptions of services.

Nonetheless, there are shortcomings. Most college librarians lack knowledge of the laws and regulations related to intellectual property rights, and their mastery of such information is not always satisfactory. In addition, they do not have enough experience in intellectual property practice, which is an important part of these services in college libraries. Few librarians have experience working on intellectual property practice, and they can rarely meet the needs of users for services related to intellectual property application and practice. Notably, most librarians in college libraries lack a

background in studying science and engineering. Intellectual property information services in college libraries involve a large volume of work, such as patent consulting, retrieval and search services in science and engineering. These services require librarians who have studied science and engineering. Therefore, it is necessary to increase the recruitment of relevant talent to meet the everincreasing demand for intellectual property services.

# 3. COLLEGE LIBRARIES SHOULD ESTABLISH A HIGH-QUALITY AND HIGHLY SPECIALISED SERVICE TEAM WHILE ENSURING A STEADY SUPPLY OF RESOURCES

Intellectual property services are another part of high-end information services next to the academic discipline services in college libraries, and intellectual property rights involve many fields such as economics, law and technology. [7] As knowledge-intensive services, there are high thresholds for technical and professional property requirements, but the intellectual information service teams in higher education institutions are currently less competent, which is one of the main factors restricting the level and effect of services. [8]

Furthermore, college libraries should establish an intellectual property training system, as it is an important means to effectively enhance college librarians' level of expertise in intellectual property services. The intellectual property training system for college librarians should be compatible with the content of services. In particular, it is necessary to strengthen the basic skills and practical training of librarians in intellectual property information services and encourage them to obtain qualification certificates as intellectual property specialists of higher education institutions and patent agents. It is necessary to implement the model of combining 'going out' and 'inviting in' in exchanges between libraries in various ways. Only then can cooperation be gradually expanded from inside higher education institutions to between libraries and across fields. Thus, librarians can quickly draw on their successful experience in intellectual property information services and new technologies and methods in practice.

In addition, intellectual property information service centres in college libraries can provide services according to their characteristics and

advantages. For example, the Peking University Library takes effective measures to provide intellectual property information services such as intellectual property training, patent data retrieval, analysis skills training and practical patent analysis training. The Wuhan University Library provides consulting on intellectual property information, basic knowledge of intellectual property rights and patent literature search and training on patent data retrieval, analysis skills and practical patent analysis. Moreover, the Shanghai Jiao Tong University Library delivers intellectual property information literacy training, research on newly recognised patent technologies, pre-retrieval before patent application, technical data search and situation analysis. Therefore, in the establishment of an intellectual property training system, college libraries are constantly improving the service offer, knowledge of the law and hands-on skills of librarians to satisfy the ever-increasing demand for the services.

# 4. COLLEGE LIBRARIES SHOULD EVALUATE A SERIES OF PROFESSIONAL TITLES RELATED TO INTELLECTUAL PROPERTY RIGHTS

The evaluation of professional titles plays a role in guiding, appraising and stimulating applicants. At present, college libraries mainly evaluate professional titles related to books and documents, with traditional library services as indicators and methods of evaluation. However, the evaluation of intellectual property rights-related professional titles differs from that of books and documents in varied conditions, such as the content and mode of services and knowledge reserves. Now, evaluation of professional titles related to intellectual property rights can guide, appraise and stimulate librarians to conduct intellectual property information services and further promote the advancement of the services in college libraries. In July 2019, the Ministry of Human Resources and Social Security issued a document on adding a series of professional titles related to intellectual property rights for the first time. [9] In January 2020, the Ministry of Human Resources and Social Security officially announced provisions on the evaluation of professional titles related to intellectual property rights in document No. [2020]. [10] The evaluation of professional titles related to intellectual property rights was introduced into college libraries, and the related comprehensive

strategies were presented for training experts in college libraries. This will potentially enhance the skills of librarians and facilitate the establishment of expert teams for intellectual property information services in college libraries.

College librarians need to understand the basic content of intellectual property services, which includes intellectual property consulting and patent retrieval. Intellectual property consulting is a basic service with little difficulty, while patent retrieval includes a wide range of content and coverage, such as the retrieval of entries, validity, sorting technologies by themes, sorting technologies by tracking and information about patent families. Meanwhile, it is required to issue qualified patent novelty searching or patent retrieval reports. Furthermore, the ability to provide patent information services is mainly embodied in patent analysis, which can reflect the quality and level of patent services. The scope of patent analysis services covers patent analysis in specific technological fields, core patent mining, patent early warning, infringement analysis, patent analysis based on inventors' themes, patent review, patent navigation and patent layout and transformation, which are specific applications for different purposes of services. [11] Presently, many college librarians are confined to patent situation analysis at a basic level and seldom engage in indepth patent analysis services. Therefore, there is room for patent information services to expand to an in-depth level. Additionally, college librarians should make efforts in this direction in the future.

### 5. INTELLECTUAL PROPERTY SERVICE PATTERNS

Regarding intellectual property service patterns in Chinese college libraries, against the background of the new era, domestic intellectual property service patterns have changed drastically by drawing on foreign experience. As proposed by Chen Chuanfu, Chinese college libraries should set up copyright offices, assign specialist copyright librarians and position them as composite experts adapted to the development of libraries. [12] With the advent of the new era, college libraries should strengthen education on copyright awareness and copyright management, broaden the channels of developing resources in the digital era and further enrich content with the help of technology. As emphasised by He Yanhui, while diversifying database resources, college libraries should determine the 'differences in copyright ownership

between independent copyright and co-construction by multiple parties, establish copyright awareness and pay attention to copyright protection'. [13]

As the development path of digital resources in college libraries continues to widen, libraries have strengthened guidance on copyright queries, improved the copyright settlement system, assisted in the application for copyright licences and enhanced the librarians' skills.

For example, the Shanghai Jiao Tong University Library has opened a patent classroom and established a patent service platform, which provides a useful reference for college libraries to conduct intellectual property services.

College libraries should clarify their duties and functions in intellectual property information services.

Measures for Implementing the Construction of Intellectual Property Information Service Centers in Higher Education Institutions specify that the main clients of intellectual property information services in higher education institutions are oncampus users i.e. teachers and students and their functional departments. Based on fulfilling their intellectual property information services, if possible, they can expand the users of services to scientific research institutes, enterprises, government departments and other off-campus users, giving full play to their advantages of information resources and talent, thereby serving the local economy and industries.

College libraries should find the right positioning based on their particular conditions. Most libraries mainly focus on patent information services when conducting intellectual property information services. The positioning of their service levels should be mainly aligned with basic information and intelligence, such as patent consulting, patent retrieval, new patent searches and patent analysis. College libraries with greater capacity should expand their services from patent services to other intellectual property information services such as trademarks, copyright, software copyright and geographical indications. Regarding the positioning of service levels, college libraries with great strengths should develop from basic patent services to in-depth patent information services such as patent value assessment and grading, key patent mining, patent agents, cultivation of high-value patents and patent transfer and transformation.

In addition, college libraries capable of providing services beyond their scope of business can expand their objects of services to research institutes, enterprises and government departments in local areas. Oriented to the development of local industries, they can provide personalised, high-end intellectual property information services and even cross-regional services. Eventually, intellectual property information services will have a wider range of clients, in-depth content and diversified service patterns. [14]

## 6. STRENGTHENING TECHNOLOGICAL INNOVATION AND BUILDING THINK TANKS

Over time, it becomes an inevitable trend for college libraries to innovate in technology and build think tanks.

Intellectual Property Management for Higher Education Institutions, implemented in January 2017, proposes requirements for improving the management capacity and process of scientific and technological innovation. [15] Meanwhile, under the guidance of the Plan for Advancing the Building of New Think Tanks in Higher Education Institutions with Chinese Characteristics, released in 2014, the building of think tanks on intellectual property in college libraries via new technologies can be carried out to integrate and redevelop various network information resources and improve the efficiency of knowledge transformation and information services. [16] In this process, it is a must to adopt a correct ideological stance and prepare ourselves against possible risks. At present, many college libraries have registered accounts on Weibo, WeChat and other network platforms to quickly understand the information needs of readers, improve the creation and development of information resources and strengthen the degree of matching information resources with readers and librarians with readers according to messages and comments from readers, enhancing the service efficiency and resource use of libraries. Meanwhile, college libraries have gradually become 'intelligent' using the Internet of Things, cloud storage and other technologies. Libraries can use software such as a network positioning system and a search memory system to provide the services of data analysis, data mining and knowledge discovery, track readers in physical libraries, analyse their interests and professional backgrounds and supply literature information to them according to the analysis results for their reference and choice.

With relevant policies as a basis and guidance, college libraries should fully exploit the advantages of resources in higher education institutions to offer intellectual property information services under laws and regulations, mainly aimed at promoting practical activities for the transformation and utilisation of intellectual property rights. Thus, it has a far-reaching impact on the improvement of comprehensive teaching and research levels and the development of the 'Double World-class Project' in higher education institutions. It is necessary to further strengthen technological innovation and build think tanks to open up a new era of intellectual property information services in higher education institutions.

### 7. CONCLUSION

For national strategies such as the strategy for innovative development and building an intellectual powerhouse, intellectual property property information services in college libraries have been emphasised unprecedentedly, with broad prospects of development. The building of an intellectual property service system is a top-level design priority for the intellectual property services of higher education institutions, which determines the service quality and development direction of libraries. Contextually, college libraries should be aware that it is essential to take intellectual property information service as their new direction of service transformation. Correspondingly, college libraries should give full play to their innate advantages in information and human resources, fully integrate internal and external resources, optimise the intellectual property service process, innovate in service patterns, deepen the content of services and improve service quality. Additionally, they should cooperate with multiple parties to serve the local economy and industrial development. Meanwhile, the building of the 'service alliance' should be accelerated. The alliance develops a fast track for the development of high-quality intellectual property information services based on the principles of 'joint consultation and construction', 'mutual benefit and sharing' and 'win-win cooperation' to play an important role in leading and demonstration.

By providing intellectual property information services, college libraries support collaborative innovation and the 'double world-class project' of higher education institutions effectively, provide indepth intellectual property information services for the development of the local economy and industries and strive to create a new era of intellectual property information services.

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