Research on Talent Training Mode of Intellectual Property from the Perspective of School-Enterprise Cooperation

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The research is financed by research and practice project of education and teaching reform in Anyang Normal University(No.ASJY-2019-CYB-010) and intellectual property soft science research project of Henan Province (No. 20190106013).

Abstract: In recent years, more and more enterprises cooperate with universities to cultivate talents. This article from three levels, and to study intellectual property professional personnel training mode, through to the regional distribution of talents specialized in intellectual property, curriculum, training methods and employment prospects to conduct a comprehensive analysis, comparison between docking perspective the advantages and disadvantages of different intellectual property talent cultivation patterns, and is suitable for China's national conditions to meet the market demand of the intellectual property rights of professional personnel training mode, and can effective countermeasures and Suggestions are given for different situation.

Key words: school-enterprise connection; intellectual property; personnel training; problems and countermeasures

I. Introduction

1.1 research background

Intellectual property has increasingly become an important core of international competitiveness. The competition among enterprises is the competition of intellectual property, and the key of intellectual property competition is the competition of intellectual property talents, whose personnel training is an urgent task. China has formed a multi-level training mechanism for intellectual property professionals, such as doctor, master, master of law, dual degree and dual specialty, full-time undergraduate, etc. However, the seemingly prosperous professional education of intellectual property actually has many problems. For example, China's intellectual property undergraduate major was warned by the red card in 2014, and its application was restricted. The main reason is that the employment situation is not ideal. Experts from the intellectual property professional education steering committee of the Ministry of education pointed out that "China's intellectual property professional training, especially at the undergraduate level, is disconnected from the needs of enterprises, which leads to the failure of the University's training system to meet the employment needs, and ultimately the intellectual property In Beijing, Shandong and other places, the right major has been warned by the yellow card or even the red card. In order to solve this problem, it is necessary to study the talent model of undergraduate, master and doctor of intellectual property in China from the perspective of school enterprise connection.

1.2 connotation of school enterprise cooperation

School enterprise connection, also known as school enterprise cooperation, is a "win-win" mode that focuses on training quality, school learning and enterprise practice, and resource and information sharing between school and enterprise. Currently, the social competition is fierce. In order to seek their own development, colleges and universities should pay attention to the quality of education, adopt the way of cooperation with enterprises, train talents for enterprises, and pay attention to the practicability and efficiency of talents Effectiveness. School enterprise cooperation meets the needs of the society, integrates with the market, cooperates with enterprises, and combines practice with theory.

Therefore, this paper intends to make a comprehensive analysis of the regional distribution, curriculum, training methods and employment prospects of intellectual property professionals, compare the advantages and disadvantages of different modes of intellectual property talents training from the perspective

DOI: 10.9790/7388-1001041419 www.iosrjournals.org 14 | Page
of school enterprise docking, and come up with a mode of intellectual property talents training that is suitable for China's national conditions and meets the market demand, and can provide effective countermeasures for different situations Suggestion.

II. The Current Situation Of Intellectual Property Professionals Training In China

2.1 analysis on the establishment of intellectual property in Colleges and Universities

Intellectual property majors have different ways of talent cultivation in different schools. Some of them are located in law schools, some are located in management schools, colleges and universities that have established intellectual property schools or intellectual property departments, and colleges and universities that have established intellectual property research institutes or research centers recruit students and cultivate in intellectual property schools or research institutes, which leads to different degrees. The degree of law is awarded in law schools, and the degree of management is awarded in management schools. At present, China has formed three levels of intellectual property personnel training system.

2.2 intellectual property talents

2.2.1 connotation of intellectual property talents

Intellectual property talents mainly refer to the professionals who are engaged in related work in the field of intellectual property after graduation. They can be divided into theoretical, compound and practical intellectual property professionals. At present, professional intellectual property talents in China can be roughly divided into six categories: intellectual property administrative and law enforcement talents, intellectual property review talents, intellectual property legislative and judicial talents, enterprises and institutions intellectual property management talents, intellectual property intermediary service talents, and intellectual property teaching and research talents.

2.2.2 characteristics of different levels of intellectual property talents

At present, China has formed an intellectual property professional training system with three levels of master, master and master. Due to the different educational resources, talent training programs and curriculum settings of the institutions where each training level is located, the intellectual property professionals at the three levels of master, master and master differ in their intellectual reserves and professional skills, and their ability to adapt to different work contents is also high or low.

The talents at the undergraduate level of intellectual property are in the primary stage in terms of basic knowledge and practical skills. However, after the basic course learning and basic skills training during the undergraduate period, they have the basic legal thinking and the ability to use legal theory to deal with specific affairs. In addition to the basic legal theory, intellectual property management professionals generally have the ability of patent retrieval and patent analysis.

With the further deepening of the study of intellectual property related majors, the professional skills and academic writing ability of the master of intellectual property have been strengthened. The intellectual property law professionals have the strength to engage in intellectual property legal counsel, and the intellectual property management professionals can also complete the work of patent analysis and patent and trademark agency. Compared with the intellectual property talents at undergraduate level, the postgraduate can meet the employment demand of higher-level enterprises, so they are more competitive in the employment market.

Compared with the master's degree, the intellectual property doctoral level talents have stronger professional and intellectual property affairs processing ability, and higher academic level, which can meet the needs of technology development and related academic research of large enterprises. The intellectual property talents at doctoral level basically have their own research direction, so the theoretical basis of law is more profound, the patent analysis ability is stronger, the specialty is more relevant, and the employment rate is higher.

2.2.3 employment direction and development prospect of intellectual property professionals

As a scarce resource of the whole society, intellectual property professionals are also the key subject of knowledge innovation, and they are in an advantageous position in the employment market. By analyzing the employment situation of 10 kinds of intellectual property related professional positions in the employment market, the intellectual property students can engage in trademark agency, patent agency and other specialized intellectual property affairs in law office, patent office, trademark office, etc. after graduation, they can also engage in specialized intellectual property judicial trial and other legal affairs in public, prosecution, law and other departments at the same time Or engaged in intellectual property management in Copyright Office, trademark office, patent office, science and technology office and other departments. [11] after graduation, intellectual property professionals are mainly engaged in legal industry, new energy industry,
2.3 analysis on the cultivation of intellectual property professionals

2.3.1 regional distribution of intellectual property professional training

There are great differences in the regional distribution of intellectual property in China. Figure 1 is the city information map of intellectual property universities. For the purpose of simplifying data and eliminating low-value statistical information, the top ten cities with the largest number of intellectual property universities are selected from the data information of each city for data analysis.

![Figure 1 city information map of intellectual property universities in China (top 10)](image)

From the city map of the distribution of intellectual property universities, we can see that there is a serious imbalance in the regional distribution of intellectual property professionals in China. Most of the universities with intellectual property majors are concentrated in the municipalities directly under the central government, the Yangtze River Delta and the Pearl River Delta. Among them, Beijing, Shanghai and Guangzhou are still the main battlefields for intellectual property professionals, while Wuhan, Hangzhou, Nanjing, Tianjin, Shenzhen and Xi'an are also the areas where intellectual property talents are concentrated. As a new industry, intellectual property has developed rapidly in recent years. The regional distribution of relevant professionals is closely related to the level of urban economic development and the level of scientific and technological development. Some cities with more developed Internet industries, such as Beijing, Shenzhen, Hangzhou, etc., have greater demand for intellectual property talents than other cities.

2.3.2 training requirements for intellectual property professionals

(1) the major of intellectual property should pay attention to the cultivation of compound talents.
(2) the major of intellectual property should cultivate high-level talents.
(3) the major of intellectual property should cultivate practical talents.
(4) the intellectual property specialty should cultivate open talents.

2.3.3 training courses for intellectual property professionals

In the past, the major of intellectual property has always been based on the law, so the early courses of intellectual property tend to be law courses, which are mostly set up in law schools. In recent years, with the increasing diversification and integration of the employment demand of intellectual property related enterprises, the curriculum of intellectual property professional training in Colleges and universities has been
innovated. However, it can be seen from the current intellectual property talent training plan of most colleges and universities that, compared with the traditional intellectual property curriculum, most of the new curriculum only adds intellectual property law courses in addition to the original basic courses of law, such as patent law, trademark law, copyright law and other courses, which are difficult to meet the "science and engineering + intellectual property" proposed by modern intellectual property related enterprises. Therefore, there are still many problems in the cultivation of intellectual property professionals.

III. Enterprise Demand Data Research

3.1 Statistical Data Source of Enterprise Position Demand

The data sources of this survey on the job demand of intellectual property related enterprises are major recruitment websites, provincial and municipal talent employment service centers, provincial and municipal talent networks, such as zhaopin.com, zhaoji.com, 51job.com and other mainstream websites.

3.2 Statistics and Analysis of Vocational Skills Needs of Different Enterprises

According to the different contents of work, there are six kinds of intellectual property related institutions, including: (1) intellectual property administrative and law enforcement institutions; (2) intellectual property review institutions; (3) intellectual property legislative and judicial institutions; (4) intellectual property management departments of enterprises and institutions; (5) intellectual property intermediary service institutions; (6) intellectual property teaching and Research institutions. Different types of employers have different needs for professional skills of intellectual property professionals. After investigating a large number of recruitment information of enterprises, we get the statistical information of vocational skills demand of intellectual property enterprises. This paper summarizes the vocational skills demand information of different enterprises for the three levels of intellectual property talents, i.e. Ben, Shuo and Bo, to provide data support for determining the training strategies of intellectual property professionals of different levels.

3.3 Training Strategies for Intellectual Property Professionals

It can be seen from the statistical table of vocational skill needs of enterprises that different enterprises have different ability needs for different positions and different levels of talents. In order to better realize the docking between universities and enterprises and improve the quality of talent training, universities should implement targeted talent training strategies for undergraduate, master and doctoral students at different levels.

For the undergraduates majoring in intellectual property, colleges and universities should take the basic theory courses of intellectual property as the foundation, the actual professional skills requirements of enterprises as the guidance, and the professional skills training of intellectual property as the supplement. In the process of daily education and teaching, colleges and universities should constantly guide students to participate in a variety of intellectual property professional skills activities, deepen their theoretical knowledge in practice, and exercise their professional ability, such as guiding students to participate in intellectual property skills competition, patent retrieval competition, intellectual property summer camp, etc., participate in research on intellectual property related topics, and participate in intellectual property rights Academic exchange meeting, receiving distance education courses of intellectual property, etc.

For intellectual property professional doctors, colleges and universities should focus on cultivating the academic research ability of such talents, guide students to actively participate in academic research, regularly participate in academic exchange meetings, expand the reading volume of academic papers and journals in addition to basic course learning, actively contribute to core journals, and constantly improve students' academic research ability. In addition, we should continue to strengthen the students' English literature reading ability and oral expression ability.

IV. Problems and Countermeasures of Intellectual Property Professional Training From the Perspective of School Enterprise Connection

4.1 Problems in the Cultivation of Intellectual Property Professionals in China

(1) the discipline system of intellectual property is single, which can not meet the needs of diverse talents.
(2) there are interdisciplinary disciplines in the major of intellectual property, many and disorderly curriculum, and vague positioning of intellectual property education
(3) there are many colleges and universities for intellectual property specialty, but the overall research ability is weak, and there are differences in talent cultivation level and region.
(4) the degree of connection between the training of intellectual property professionals and the market demand is low, the employment rate of new students is low, and the employment information is asymmetric.
(5) the training plan of intellectual property professionals is lack of innovation, the effect of personnel
training is low, the practical operation ability of intellectual property talents is weak, and the training mode needs to be innovated.

4.2 measures to improve the training mode of intellectual property professionals

(1) continue to improve the Discipline Training System of intellectual property. On the basis of the original intellectual property personnel training system, we will continue to improve, add new personnel training methods such as vocational education, double degree, professional master's degree and postdoctoral degree, and promote the normalized and diversified development of intellectual property personnel training.

(2) colleges and universities should reasonably arrange training courses in combination with the training program of intellectual property professionals and the market demand, so as to make sure that the required courses and supplementary courses of intellectual property majors are reasonably matched, the difficulty of the courses is moderate, and the basic knowledge teaching and practice activities complement each other. Under the premise of ensuring the training effect of talents, the training program of intellectual property professionals should be innovated to reduce the number of students The burden of schoolwork, improve the quality of personnel training.

(3) colleges and universities should change the traditional concept of intellectual property personnel training, and strive to explore new ways of personnel training in addition to classroom teaching in addition to the training of basic knowledge. The cultivation of intellectual property professionals in Colleges and universities can combine classroom teaching with professional skill training and academic ability training, and guide students to improve their professional skills by participating in various ways, such as intellectual property intellectual competition, patent retrieval ability competition, intellectual property publicity volunteer service, intellectual property summer camp, intellectual property Academic Forum lecture, tutor related project team, etc At the same time, deepen the understanding of theoretical knowledge.

(4) strengthen the construction of intellectual property personnel training team and academic exchanges in related professional fields. In order to cultivate high-quality and compound intellectual property talents, high-quality and high-level education and teaching team is essential. Therefore, colleges and universities should introduce more preferential policies to attract more talents into the teaching team. At the same time, we should strengthen academic exchanges and pay close attention to the latest academic developments in the field of intellectual property so as to update the intellectual property discipline knowledge system in time.

(5) optimize the new mode of intellectual property talent training between school and enterprise. To advocate the establishment of in-depth cooperation between colleges and enterprises, colleges and universities should train relevant talents according to the actual employment needs of enterprises, and boldly adopt a variety of new modes of talent cultivation, which can not only improve the work efficiency of enterprises, promote the income generation of enterprises, but also help to improve the employment rate of talents in Colleges and universities and avoid the waste of talent resources.

Reference


[3]. Huang Jian. Research and Analysis on teaching resource management system of University Enterprise Cooperation [D]. Yunnan University, 2015

[4]. Yu Pei. Research on the cooperation and development between colleges and enterprises in Shandong Higher Vocational Education [D]. Northeast University of Finance and economics, 2017

[5]. Du Yu. How to effectively use the production and training resources of the college [J]. Science and technology information, 2015,13 (13): 187

[6]. Zhong Ruidong. Some thoughts on the establishment of intellectual property undergraduate major [J]. Charming China, 2009, 04:77-78


[13]. Discussion on hot issues in intellectual property education in universities at the 20-year forum of China's intellectual property higher education [J], China invention and patent, 2007 (11): 29-34


DOI: 10.9790/7388-1001041419