

The Ways to Improve the Protection Ability of Intellectual Property in Institutions of Higher Education

Jun Yang^{1,a}

¹Huazhong Agricultural University, Wuhan, China

^a520189453@qq.com

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Abstract. Intellectual property is becoming the focus of competition between countries, which is vital to raise our awareness of intellectual property and to enhance our intellectual property protection ability. This paper describes the definition and features of intellectual property in institutions of higher education, and analyzes its protection status. By concluding the present shortage of protecting intellectual property, we propose a highly targeted and feasible measure, which helps to improve the protection ability of intellectual property in institutions of higher education.

Introduction

In the era of knowledge economy, the features of global economic integration are quite distinctive. The connection of the whole world is much closer. And the competition of comprehensive national power has become the competition of science and technology, which has directly affected a country's overall economic development. Hence, it is very necessary for a country to master the modern science and technology to maintain its international competitiveness. In the background of economic globalization, intellectual property shows international development trend and plays an increasingly central role in modern science and technology. Therefore, the protection of intellectual property and its development have become a significant international issue.

Intellectual property is becoming the focus of competition between nations. To achieve a sustainable economic development and grasp the competitive advantage, we should rely on the creation and application of intellectual property. This is of great significance of increasing our awareness of intellectual property and to enhance our protection ability of intellectual property. Generally, a country with more advanced economy shows higher requirement of institutional arrangements for intellectual property. Institutions of higher education should play its important role in technological innovation, and constantly strengthen and improve our intellectual property creation, transformation and protection ability construction.

Intellectual Property in Institutions of Higher Education

Definition of intellectual property in institutions of higher education. Intellectual property in institutions of higher education mainly refers to the creators and owners enjoy exclusive rights of their academic achievements according to the law, including patent right, trademark right; technical secrets and commercial secrets; copyright and related rights; university logo and all kinds of service logos; as well as other intellectual property owned by the institutions of higher education based on the laws, regulations and contracts.

Intellectual property in institutions of higher education is a major part of the entire intellectual property system. It has the general features of intellectual property. In addition, the subjects of rights are in institutions of higher education; hence, it also has some unique features:

Complex right subjects. The foundation of intellectual property is based on the achieved original results, which refers to the creative intellectual investment. To some extent, it also depends on the capital investment. In institutions of higher education, a successful creative activity of knowledge relies on many scholars in a field or a research team which includes teaching and administrative staff,

students, and scientific research institutes and so on. The funding sources are also very complex, national funding, local government funding, enterprise and institution funding, individual donation and foreign scientific and technological cooperation funding. All of these make the ownership of intellectual property in institutions of higher education much more complex.

Various property objects. In the field of intellectual property, the intellectual output is concrete, sensuous and objective category, which is the premise and foundation of legal relations of intellectual property. The institutions of higher education have a wide range of subjects and the professional scholars are quite centralized. Their academic achievements are of many types and forms, including the copyright achievements (for instance, academic books, papers, computer software, engineering designs, product design drawings and its descriptions), the technological secret achievements (for instance, new products, new materials, new production technology, processes and technologies), trademark right achievements (for instance, university name, university logo, registered trademark) and so on. It is obvious that the objects of intellectual property in institutions of higher education are much more various than those unprofessional groups.

Flowing knowledge achievements. Every year, a large number of undergraduates and postgraduates graduate from colleges and universities. During their learning, they engage in much of the research work through the guidance of instructors. And they master the technical content and secrets of the research project, even some of them have completed most of the project. While entering a new institution, most of the students still engage in the research, which results in the flow from school to society. Furthermore, in the era of knowledge economy, the competition for knowledge eventually has become a competition for talents. The mobilize frequency of the scholars in colleges and universities has increased. And the flow of talent also causes the flow of knowledge. On the other hand, in the domestic and international academic exchanges, such as lectures, visits, study tours, consulting and communications, also cause the dissemination of knowledge achievements. Therefore, the intellectual property in institutions of higher education shows the features of wide flow range, large flow volume and high flow frequency.

The main elements of protection ability of intellectual property in institutions of higher education. The protection ability of intellectual property in institutions of higher education has three main components: the subject, object and intermediary of intellectual property. The object is the intellectual property in institutions of higher education. Its definition, range and features have been discussed above. In this session, its subject and intermediary are mainly described, which is also an important part of our research.

Present Status of the Protection Ability of Intellectual Property in Institutions of Higher Education

In institutions of higher education, the number of patent applications and grants is less in general and the researchers are not enthusiastic enough. Being an important part of intellectual property, patents have not been attracted much attention, which is not consistent with the target of establishing an innovative country and implementing intellectual property strategy. Over time, this would finally cause the decrease of the innovation and competition of science and technology. The institutions of higher education are the main force in scientific research. However, their patent work is far behind the development requirements and fails to promote the progress of patent technology and contribute to the strength and competitiveness of countries and regions.

The patents in institutions of higher education are high-tech. They are also highly inventive and creative. This initially displays their quality and level, as well as their application quality and agent quality. Meanwhile, it shows that the institutions of higher education have paid too much attention to scientific discovery instead of technological invention.

Strategies to Improve the Protection Ability Construction of Intellectual Property in Institutions of Higher Education

To strengthen the perception of intellectual property and prevent its loss. The staff in institutions of higher education should pay enough attention to intellectual property protection. The

leaders' awareness of protection is the key to promote the innovation of technology and the construction of protection ability. The researchers' awareness of protection is the guarantee of implementing the protection ability construction of intellectual property. The owners' awareness of protection is the direct and basic condition of accelerating technological innovation.

Universities should actively promote the popularization of intellectual property law through network, newspaper and some other medium, invite some authorities in intellectual property to popularize the knowledge of intellectual property for scientific research staff, and enhance the protection awareness of intellectual property (for instance, the patent enlightenment carried out by Nanjing University). While training and selecting the talents, universities can also strengthen the popularization of knowledge and protection awareness of intellectual property. For instance, in the postgraduates' re-examination and the importing talented teachers' evaluation, the knowledge of intellectual property can be added in the tests with an intention of improving their protection awareness and ability. Rationally using legal means helps to strengthen the punishment for the behavior causing the loss of intellectual property and protect the legal rights of owning intellectual property. In addition, the regular seminars on intellectual property can enlarge the staff's knowledge of intellectual property.

To complete the organization structure and improve the protection system. Under the condition of completing laws and regulations, the institutions of higher education could set the management department of intellectual property, which is responsible for the management, maintenance and operation of patent which is the cores of intellectual property. It also helps to enhance the relation of universities and high-tech companies and academic research institutes, which would contribute to the industrialization of scientific achievements, the coordination between universities and the industry, which helps to better promote the transformation of technology in institutions of higher education.

To optimize the environment protection and accelerate the transformation of property rights. The fundamental purpose of protecting intellectual property is to effectively transfer the scientific achievements into practical productivity to gain economic interests and contribute to the comprehensive national strength. Intellectual property system can stimulate innovation, standardize competition and regulate interests. Therefore, the institutions of higher education should take intellectual property into consideration while carrying out development strategy, emphasis on research and implementation of intellectual property strategy and strengthen the internal dynamic mechanism of intellectual property. The institutions of higher education should establish the right and effective intellectual property incentive system. The focus is that after the marketization of intellectual property, we could use some of the interests to reward the creators, the inventors with an intention of connecting intellectual property and the market. It not only stimulates scientific researchers' enthusiasm and innovation, but also improves the competitiveness of academic research, as well as the advantage of the cooperation with foreign institutes. The greater the benefit is, the more reward will be. The inventors can even gain hundreds of thousands from patent fees. Therefore, this could help to the innovative activities to be aim at the market demands, research market dynamics, which ensures that the scientific and technological innovation is mainly market-oriented and economy-oriented. In the value distribution, we should adhere to the principle of people-oriented and insist the allocation principle of adopting knowledge and technology as productive factors. The benefits of universities, inventors and creators should be taken into consideration in order to gain the greatest economic returns.

To construct security platform and improve work efficiency. The university students should take the blame for intellectual property protection. Before graduating from universities, they should sign a treaty that they would be responsible for the protection of intellectual property while they are in service. Any usage should be paid. For those who have retired or left must sign an agreement that they would not deal with intangible assets without permission and damage its technical rights and economic interests. For those who work out or enter a new company, they should pay if they apply the scientific achievements, which should be met in the agreement they sign.

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