

Research on Intellectual Property Rights of Electronic Commerce from the Perspective of Big Data

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Abstract. With the continuous development of Internet information technology and the gradual opening up of globalization, the global economy, politics, science and technology and other fields have been continuously upgraded, making the protection of intellectual property rights such as trademarks and patents constantly breaking through the line of defense. Infringements are everywhere, especially what is highlighted is the application of big data to intellectual property issues brought about by e-commerce. Starting from the special perspective of big data, this paper discusses several major issues concerning intellectual property protection in the e-commerce environment, and puts forward suggestions for constructing an e-commerce intellectual property protection supervision system to adapt to the arrival of the era of big data.

Keywords: big data; e-commerce; intellectual property.

1. Introduction

The rapid development of the Internet has spawned a large number of emerging industries. The rise of e-commerce has subverted the traditional business model. Because online orders are simple and fast, online transaction negotiation is not limited by time and space, region, country, language, etc., as well as big data and clouds. The rapid development of the platform has also boosted the development of e-commerce. Of course, this is inseparable from the strong support of the government. A series of technological evolution and economic and social development reforms have intensified. However, while the technological and commercial business models have evolved and developed rapidly, relevant policies and regulations have not been followed up in time, and there are no corresponding supporting measures to regulate them. The property rights are particularly prominent, which has led to research on issues related to intellectual property protection in the e-commerce environment, which has made the issue of intellectual property protection in the predicament of e-commerce more complicated and global.

2. Research on Intellectual Property Issues in the Background of Big Data

With the development of technologies such as data storage, communication, social software, and mobile Internet, “Big Data” has become a hot word in the Internet information technology industry. Big data is a large and complex set of data that is difficult to process using existing database management tools or software. The challenges include acquisition, management, search, storage, sharing, analysis, and visualization. The focus of big data lies in the analysis and application of “data”, while “big” is just the appearance of massive data generated by the continuous development of information technology. The “big” of “big data” lies in linking various scattered data to each other and more clearly understanding the nature of the transaction and the future orientation. The arrival of the era of big data will bring about a major change in people’s thinking, business models and management methods, and gradually expand and penetrate into all areas of society. The core of big data lies in forecasting. An important part of intellectual property is also the prediction of technology. The both have the same effect.

Intellectual property rights no longer analyze patent information alone, but combine business, economics, trade, technology, legal and other information for comprehensive analysis. Big data will link these isolated data or information into an organic ecosystem. The data processing process of intellectual property rights will be extremely rapid and efficient, and the retrieval, storage, cleanup, indexing, statistics and visualization of massive patent data are no longer obstacles. Intellectual property is no longer a process-based, independent, manual indexing project analysis, but a modular,

order-based, and intelligent project analysis. Once the technical field or technical theme is defined, the big data intellectual property system can automatically Form an intellectual property report, including charts, analysis contents, analysis conclusions, etc. in the report. The future intellectual property service system will actively recommend the patented technology that you care about, automatically track and summarize the enterprise information, send competitor dynamics or patent warning information to the enterprise in a timely manner, and notify the government and industry management departments of the status of the patent in the industry. Provide relevant evidence for the formulation and promulgation of relevant policies. Therefore, it can be seen that when intellectual property rights encounter big data, there will be a dazzling light between them, which will help intellectual property personnel to open a new analysis mode. Introducing big data technology in the intellectual property process is the future development trend.

3. Research on E-commerce Intellectual Property Issues

3.1 Economic Development has made Intellectual Property Protection Increasingly Concerned

Now China has become the world's second largest economy. In the process of economic development, our enterprises have also grown stronger. Among them, such as Huawei, ZTE, and Alibaba have emerged some world-class enterprises. The market has developed to a new stage. More and more enterprises are paying more and more attention to intellectual property issues, building an intellectual property protection system including e-commerce, forming a benign development and enhancing the international competitiveness of Chinese enterprises.

3.2 Difficulties Faced by E-commerce Intellectual Property Protection

The development of e-commerce often faces the dilemma that a considerable part of the goods sold online is infringing goods. Or it is infringing on the copyright of others, or patent design, or packaging ideas, or even directly selling other people's products to sell online. Especially in science and technology, the cottage or the use of other people's technology and products in the case of infringement of intellectual property rights has indeed brought us tangible economic benefits. However, from a long-term perspective, we cannot imitate others forever. Rather than saying that we used to infringe on intellectual property rights, we are stifling innovation.

4. Constructing the E-commerce Intellectual Property Protection Supervision System from the Perspective of Big Data

4.1 Improve the Big Data Mechanism and System of E-commerce Intellectual Property Rights

On the era of big data, the shallow knowledge of corporate big data is an important reason for the lack of intellectual property management. To this end, domestic enterprises should deeply root the awareness of big data, and use the thought-driven behavior to organize data participation activities inside and outside the organization, form a special intellectual property department under the application of e-commerce big data, and provide safe and reliable, unified, social and enterprise. A two-way interactive intellectual property application center.

The domestic IPR e-commerce big data management work is independently operated and managed by different departments. The management work between departments and departments lacks joint operation, and the structure within the system is scattered, resulting in the inability to achieve an efficient and unified and coordinated management of the IP data management mechanism. How to effectively distribute the big data management of e-commerce intellectual property and the linkage of departmental and inter-departmental work, the integration of e-commerce intellectual property data resources, the unification of the e-commerce intellectual property big data management platform, and the laws and regulations Improvement and so on are all the work that needs to be improved in the current IPR management of China's e-commerce.

Based on the successful experience and measures of foreign big data systems and management work, the domestic real situation of simultaneous is proposed to meet the actual e-commerce intellectual property data system in China, so as to become an electronic system that coordinates the domestic e-commerce intellectual property data and seamlessly connects the economic entities of developed countries. Business intellectual property big data mechanism.

4.2 Strengthening Technological Innovation in the Protection of Intellectual Property Rights in E-commerce

In this respect, the relevant state departments can jointly promote the upgrading of technical means by using the e-commerce platform or develop new technical means to protect the intellectual property rights of e-commerce. To a certain extent, this can restrict the occurrence of intellectual property infringement cases, improve the efficiency of prevention, and improve the reliability of tracing and screening. At the same time, new technical means should be combined with national legislation to provide experience and reference for legislation, and promote legislation. Update development, the same new legislation also forced the upgrading and transformation of technology.

5. Summary

In the big data environment, big data management of e-commerce intellectual property is an inevitable requirement. Therefore, enterprises must pay attention to e-commerce big data, and realize the importance of e-commerce intellectual property big data, starting from their own work, applying big data technology, supporting related e-commerce intellectual property big data maintenance and management system, Promote the innovative development of e-commerce intellectual property. At the same time, we can learn from the results of electronic data management of e-commerce in developed countries, and use them in domestic big data technology applications to ensure effective functions and achievements in the application of big data e-commerce intellectual property.

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