

# Intellectual Property Management of E-commerce Enterprises—From a Policy Driven Perspective

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**Abstract.** China is currently the world's largest E-Commerce market. With a forecasted compound annual growth rate in double digits, online retailing is expected to grow from 17% of total retail sales in 2017 to 25% by 2020. E-Commerce, more than other business systems, often involves selling products and services that are based on intellectual property, e.g. its searching engine, software, domain names, databases, etc. Therefore, the management of intellectual property is critically important for E-Commerce enterprises. This paper analyses the current status of E-Commerce development in China, the intellectual property issues aroused by E-Commerce and how should E-Commerce business operators manage their IP portfolios and strategies to enhance its business.

## The Emerging E-commerce in China and Intellectual Property

### Defining and Measuring E-commerce

The Organization for Economic Cooperation and Development has broadly defined E-Commerce as “all forms of commercial transaction based upon the electronic processing and transmissions of data, including text, sound and visual images.” [1] Report shows that E-Commerce has grown vigorously worldwide recent years. In 2015, the global population amounted to approximately 7.3 billion people, of which 1.4 billion have ever purchased goods and/or services online, spending \$2,272.7 billion in total, [2] among which China ranks first on the E-Commerce sales, [3] which has nurtured a group of E-Commerce giants including Alibaba, JD and Suning etc. Considering the profound impact of E-Commerce, countries all over the world are putting greater emphasis on the harmonization of the framework for E-Commerce. Taking China as an example, it is now about to implement the first E-Commerce Law to address critical E-Commerce related issues.

### E-Commerce and Intellectual Property Rights

IP consists of new ideas, original expressions, distinctive names, and appearance that make products unique and valuable. E-Commerce, different from other business systems, often involves selling products and services including music, pictures, photos, software, designs, etc., which are all forms of IP. In addition, E-Commerce is relied upon a system that is formed by various kinds of intellectual property. Many E-Commerce companies, like other technology companies, have patent portfolios and trademarks that enhance the value of their business. Facebook, for instance, acquired Source 3, a platform that recognizes and analyses branded intellectual property in user-generated content, using object recognition technology in July 2017, aiming to strengthen its business management. [4]

Arturo Ancona, a Senior Consultant of WIPO Copyright E-Commerce, Technology and Management Division, has emphasized that it is the digitalization of intellectual works has enabled intellectual property to transfer so efficiently to the internet. [5] Thus, management of intellectual property in the online environment requires our special attention.

## **Critical Intellectual Property Issues Aroused by E-commerce**

The profound impact of E-Commerce in the global economy and modern society lies in shortening of the distance between sellers and buyers and simplifying the process of shopping or trading, which will undoubtedly improve economic efficiency, competitiveness and profitability. E-Commerce model represents an enormous opportunity for the creators and the industry, but it has also aroused serious intellectual property issues which can be reflected from the following aspects:

### **Copyright: Liability of Internet Service Providers**

The technology of digitization has enabled the works of intellectual property to be migrated onto internet and transferred so efficiently. For an E-Commerce enterprise, it depends heavily on online trades, which utilize vast database of book, video, music titles and user-friendly purchasing system to attract consumers, all of which are forms of copyright works. As the internet service providers who provide transit, content access and hosting services, the E-Commerce enterprises may risk infringing copyright and related rights.

According to the Annual Report on China's Network Copyright Protection published by the National Copyright Administration of PRC, 4459 disputes concerning network copyright were adjudicated in 2016. [6] Administrative responsibilities, civil responsibilities and criminal responsibilities can be triggered due to copyright infringement. [7] Therefore, for E-Commerce enterprise, precautionary measures, e.g. accommodating standard copyright protection measures and using copyright works under the protection of "safe harbor", [8] shall be taken.

### **Patents**

Patents bestow the holder with the right to exclude all other persons from producing, selling or using the subject matter of his valid patent over a certain period of time and geographic region. Patents are especially important for E-Commerce enterprises because E-Commerce is closely linked to subjects that have recently been the subject of vigorous patent activity including telecommunications, semiconductors, business methods and software, etc. [9]

Also, patent can play a vital role during the process of E-Commerce business management: first, Employee Invention Incentive Program can be implemented to encourage creativity and boost morale; [10] second, the development of patents permits E-Commerce companies to expand their markets and create a platform where licensees develop and differentiate products; third, it helps E-Commerce companies develop strategic alliances with other companies through licensing and thereby increase their own patent portfolios.

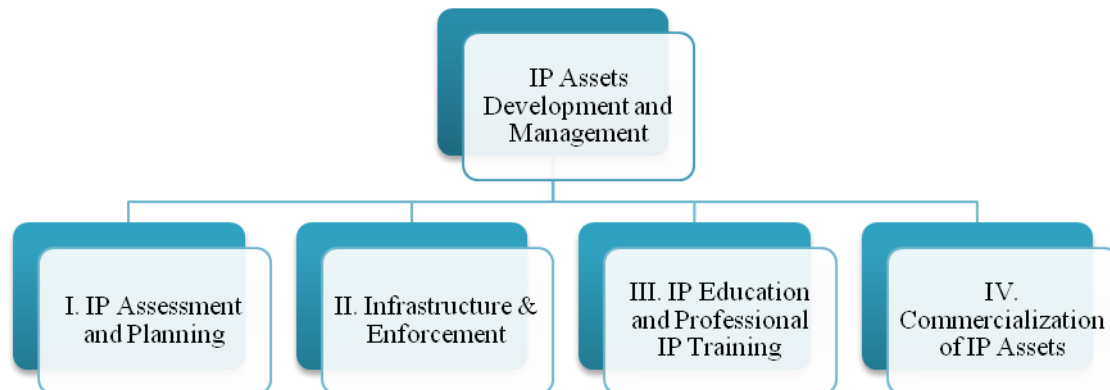
### **Trademark and Domain Names Squatting**

From the perspective of marketing, a trademark is the "front desk" of a business used to advertise its products, and may be the most valuable asset held by a business. [11] In the context of E-Commerce, the most distinctive trademark of a business can be its domain name, since the domain name is a typical instrument for communication with customers and helps to identify the source of goods and services. Whereas, expansion of commercial activities in the internet has led to the development of a new form of trademark infringement - domain name infringement, [12] also known as "cybersquatting".

The report released by the World Intellectual Property Organization ("WIPO") shows that its arbitration center has received 3036 complaints concerning cybersquatting from 109 countries in 2016. From 1999 to 2016, trademark owners have filed more than 36,000 cases on domain name disputes with WIPO. [13] The WIPO Director General Francis Gurry has urged continued vigilance by trademark owners due to the fast development of E-Commerce and the continuing growth in cybersquatting cases worldwide. [14]

## Strategic Management of Intellectual Property under E-Commerce Framework

Although the importance of IP management of E-Commerce has raised a burgeoning amount of discussion, [15] there is still a severe scarcity of how enterprises utilize such intangible assets. IP asset development and management has four key components, each component is interrelated, thus IP assets must be seen in the context of a total system involving government policies, education, technology, funding, infrastructure and other elements. [16] This part will explore enterprises' approaches in improving their IP management, particularly in patents.



### Strategic IP Planning–From a Geographical Perspective

Strategy refers to the determination of long-term goals and objective of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals. [17] Thus, a strategy represents a set of competencies and the provision of resources employed to establish competitive advantages that are sustainable in the long term, [18] which requires individual enterprises to build its competitive position by developing, using and commercializing its IP assets. China is examining regional approaches towards E-Commerce which will highly influence E-Companies' strategic IP planning. [19] During no-name inquiry to major E-Commerce advanced cities, local government officials confirmed that following the national policy of promoting the development of E-Commerce, commodities imported through Cross-Border E-Commerce Platforms shall be treated as personal goods and are not subject to any restrictions posed on common imported commodities, which significantly distinguished the Bonded Zone with other cities not governed by such Grace Period. [20] On regional level - Hangzhou, pioneer of China's E-Commerce development, has promulgated the first regional E-Commerce regulation "Regulation on the Promotion of Cross-border E-Commerce in Hangzhou." [21] E-Commerce operators, at this time, should grasp this opportunity to arrange its business layout, both industrially and geographically.

### Brand Equity: the Equivalent of Future Returns

When a consumer buys a product, certain proceeds arise from the purchase which exceeds the market value of the physical product characteristics and thus must be assigned to the brand as a trademark. The high value of individual brand is attributable to the extremely high uncertainty and long time periods associated with the process of establishing a brand. [22] In contrast to the time limitation of patent rights and technology in general, brand equity or trademark value embodied therein is extremely long lasting and hard to obviate by competitors. By granting pioneering brands exclusive use of their trademarks forever, society grants something like a patent with infinite life. [23] Once an E-Commerce platform has successfully established a favorable brand equity position

with regard to later entrants by means of its temporary monopoly position, the company benefits of the advantages of a company that followed a preemptive market entry strategy.

### **Emphasis on Interdisciplinary Training**

Education is the foundation of IP asset development, the education of young professionals, as well as experienced professionals, to develop and upgrade skills related to the cluster or target areas identified is a key part of national and regional IP policies and plans. Investment in Tertiary education, especially research and development targeted in cluster areas, is a precondition of IP management. Law school worldwide are exploring IP training programs. Stanford University, for instance, created the Center for E-Commerce to collaborate with scholars on cutting-edge, interdisciplinary research and policy-making. Such training is essential as those who managing intellectual property should have a basic knowledge of the concepts and the various methodologies for evaluating IP.

### **Commercializing IP Rights through Open Innovation and Collaboration**

One of the major differences between E-Commerce patent infringement and traditional patent infringement is that, traditionally, IP rights such as patents were seen as a method to protect technologies from being imitated. [24] However, significant changes in the global markets and rapid development of technology require us to shift toward a wider approach that considers patents as a tradable asset. Patents are long considered as the most tangible form of IP enjoying the strongest legal protection and influence the most on a firm's commercial practice. [25] Through patent licensing, an E-Commerce enterprise may retain the ownership of the IP but licensing others the right to utilize such patent. This can be attractive especially when some licensors lack sufficient distribution channels or manufacturing capacities.

In addition to utilizing and maximizing the profits of existing IP rights, E-Commerce platform also need to prevent IP infringements. PRC Tort Law specifies the liability of a network provider - if fails to take necessary measures to prevent users from infringing upon the civil right or interest of another, shall be jointly responsible for the user's infringing conduct. [26] To prevent such infringement, Alibaba has already build up a system where the complaint acceptance team, brand cooperation team, commodity management team, anti-counterfeiting team cooperate closely with its IP department – a “*quasi judicial*” complaint management system was established every time it receives an IP infringement complaint. [27] Enhancing open innovation and then capitalizing such innovation through licensing and internal collaboration is increasingly becoming a new trend for E-Commerce enterprises.

### **General Summary and Conclusion**

In the modern era, intellectual property management is not only an important part of our country's intellectual property management in the broad sense, but also an important part of corporate scientific management, which can be reflected from the research and development, procurement, marketing and other processes throughout its business operation. This thesis summarizes a few methods for E-Commerce enterprises in managing their intellectual property, however, it should be noted that due to the large amount of variables influencing the development of E-Commerce industry, “one management method does not fit all.” In the long term, E-Commerce IP management should develop into a “strategic management” which not only represents IP strategic planning, but also combining IP rights with corporate management strategy and technological innovation, so that E-Commerce enterprises will exploit their IP strategy and promote their overall management more effectively.

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- [11] e.g., the world’s most valuable trademark, Google, is valued at over US\$109.5 billion in 2017, available at: [http://brandirectory.com/league\\_tables/table/global-500-2017](http://brandirectory.com/league_tables/table/global-500-2017) (last visited Mar.8, 2018).
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E-commerce transactions in bonded cities are free from any import license documents, registration or filing requirement on infant formula, milk powder, cosmetics, medical equipment, special food (including health food, formula foods for special medical purposes etc.)

[20] During the drafting of this essay, the author conducted telephone inquiry to local Food and Drug Administrations and Inspection and Quarantine Bureaus of Shanghai, Ningbo, Hangzhou, Shenzhen and Guangzhou.

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