

Patent Abuse in the Context of International Law

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Abstract. Misuse of intellectual property rights is not uncommon, and often occurs particularly between developed and developing countries. This has a great negative impact on the progress of developing countries, global scientific and technological development and economic efficiency. The author hopes to strengthen the attention to this problem and effectively regulate the abusive behavior through the study of this issue. The definition of intellectual property abuse is vague, and this paper provides a preliminary understanding by summarizing the four basic constituent elements. Focusing on patent trolls, the paper analyzes the embodiment of intellectual property abusive behaviors and coping strategies. This paper analyzes the *Wireless Planet v. Huawei* case related to standard essential patents against the background of the TRIPS Agreement, FRAND principle, and the combination of trade barriers and breakthroughs to the traditional jurisdictional system of patent rights. In addition, this paper compares the intellectual property laws of China and the United States, and China and Japan, and analyzes the antagonism between developed home and developing home in this field.

Keywords: Trips agreements; FRAND principles; standard-essential patents; patent troll.

1. Introduction

Intellectual property rights (IPRs) have emerged as pivotal elements in the global trade system, significantly influencing technological advancement and economic growth. However, the misuse of these rights, especially in the context of international law, has become a prominent issue that disproportionately affects developing countries. These nations often find themselves at a disadvantage, facing barriers that hinder their progress in science and technology development. The strategic deployment of IPRs by developed nations, under the guise of protecting innovations, can often lead to practices that border on monopolistic, thus stifling competition and innovation in less developed markets. This research aims to delve into the complexities of intellectual property abuse and its implications for global trade, with a particular focus on the challenges and impacts on developing countries.

This study is devoted to exploring the multifaceted nature of intellectual property abuse in the realm of international trade. The primary objectives are to define and identify the various forms of IP abuse, analyze the legal frameworks like the TRIPS Agreement and FRAND principles, and assess their effectiveness in curbing such abuses. By examining specific case studies, including high-profile disputes involving major global players, this paper seeks to offer a detailed insight into how developed and developing countries navigate the complex landscape of IPRs. Moreover, the study aims to propose viable strategies for developing countries to defend against IP abuses effectively, thereby fostering a more balanced and equitable international trade environment.

The literature on intellectual property abuse is extensive, yet there remains a gap in comprehensive studies that combine theoretical frameworks with empirical analysis, particularly in the context of developing countries. Previous research has often focused on specific aspects of IPRs without integrating the international trade perspective fully. This study builds on the existing scholarship by incorporating a comparative analysis of IPR legislation in developed and developing countries and examining landmark legal cases that have shaped current IP practices.

The methodology of this research involves a qualitative analysis of secondary data sourced from legal documents, case law, and existing academic literature. Detailed case studies will be scrutinized to illustrate the real-world application of international IP laws and the outcomes of significant legal

battles. Additionally, the study will use a comparative approach to highlight differences in how IPRs are handled in different jurisdictions, providing a broader understanding of the global IP landscape.

2. Theoretical Foundations and Practical Manifestations of Patent Abuse

2.1. The Definition and Constituent Elements of Intellectual Property Rights Abuse

The definition of intellectual property rights abuse is vague because such rights are naturally monopolistic. Whether in developed countries such as the United States, where the intellectual property system is already relatively perfect, or in developing countries such as China, which started late, there are no uniform conclusions or even some blanks on the definition and judgment standards of intellectual property rights abuse.

In order to distinguish between the proper exercise of intellectual property rights and its abuse, we can roughly summarize the four constituent elements of intellectual property rights abuse. (1) the subject, usually the entity holding the IP rights, often in a dominant market position capable of influencing market conditions; (2) the subjective, typically a deliberate intention to exploit these exclusive rights to stifle competition or extract unreasonably high royalties; (3) the objective action, which includes actions that exceed the legitimate exercise of rights, such as restrictive licensing practices or excessive enforcement strategies; and (4) the object affected, generally involving direct impacts on consumers and competitors, with broader implications for the market and economic order [1].

2.2. Major Forms of Intellectual Property Abuse in International Trade

IP abuse manifests in various forms in international trade, each with distinct characteristics and implications for global market dynamics. Abusive litigation and infringement warnings involve the use of patent litigation or threats thereof to intimidate or eliminate competitors, often without a valid legal basis. Another significant form is the refusal to license and tying arrangements, where IP holders refuse to license critical technologies or tie licenses to additional, unwanted agreements. These practices exploit their dominant position and can severely restrict market entry or innovation by others. Patent pooling and evergreening also present notable challenges; while patent pooling can be used constructively, it can also be abused to limit competition. Evergreening involves making minor modifications to existing patents to extend their life beyond the original term, thereby keeping generic alternatives off the market, particularly detrimental in sectors like pharmaceuticals where it can delay access to affordable medications.

2.3. Strategies to Combat Intellectual Property Abuse: Taking Patent Trolls as an Example

Patent trolls, also known as NPE (Non-Practicing Entities), refers to a kind of shell company that relies on patents to survive [2,3]. They have no physical industry, do not produce products, and do not research and develop any new patented technology, but buy patents in large quantities at low prices, and then specialize in patent litigation to obtain significant profits. They are typically represented by Nokia, Ericsson and other outdated companies. This type of company is generally viewed negatively because: (1) it does not have any actual production, thus contributing little to the total value of society, resembling middlemen who only profit from price differences; (2) it distorts the legislative purpose of intellectual property law, which was originally created to promote invention and creativity, turning these rights into mere tools for making money and losing their balance with the protection of social interests; and (3) it causes harassment to many normally operating companies. Many of these victimized companies are not infringing, but because they value their own business reputation and believe that the cost of litigation is too high, they usually pay money to reach a settlement. This outcome, whether the patent trolls win the case or not, typically results in them receiving a substantial settlement, which fulfills their intent to extort money and encourages their increasingly aggressive behavior.

In China, for example, there are litigation paths for companies to fight against patent trolls. Companies should first avoid being intimidated by their bravado and thoroughly investigate whether an actual infringement has occurred. It has been proven that patent trolls often do not verify infringement and rely on broad intimidation tactics, sometimes issuing legal threats without intention to follow through with a lawsuit. Companies should meticulously analyze the patent details mentioned in any received legal notices, including searching for, downloading, and reviewing related patent files to assess similarities and verify the patents' validity. If the technical solution falls into the other party's patent claims, and the other party's patent is in the validity of the right, the company consider filing for patent nullification program or raising jurisdictional objections. In addition, the company can also use the "patent invalidation system", "non-infringement confirmation system", "patent abuse defense", "prior art defense" and other relevant existing legal forms to protect their interests.

3. International Norms of Intellectual Property Protection

3.1. the TRIPS Agreement and FRAND Principle

For WTO member states, the TRIPS Agreement has become a common norm that they must follow with respect to international trade. The preamble of the TRIPS Agreement highlights its dual objectives: to minimize distortions and impediments to international trade while ensuring the protection of IPRs is adequate and effective. It aims to balance these protections with the necessity that enforcement mechanisms do not themselves obstruct legitimate trade. Key provisions within the Agreement, such as Article 7 which outlines the objectives of IPR regimes, and Article 8 which sets out general principles for preventing IPR abuses, reflect this balance. Article 40 specifically empowers Member States to regulate by law the more typical and common abuses of IPRs in international trade that restrict competition, notably those arising from licensing agreements.

In parallel, the FRAND (fair, reasonable, non-discriminatory) principle address issues related to the licensing of standard-essential patents (SEPs) [4]. These principles require that SEPs, which are crucial for industry standards, be licensed under fair, reasonable, and non-discriminatory terms to all implementers. This is to ensure that patentees do not exploit their position to impose unreasonable licensing conditions that could hinder technological innovation and competition. The FRAND commitment compels a patent holder to negotiate licenses in good faith and is seen as critical in preventing the abuse of rights where patents are widely and necessarily licensed [5,6,7]. The refusal to negotiate or the demand for excessive fees is considered an abuse of rights, often leading to disputes, particularly between developed and developing countries. Such disputes underscore the strategic importance of IPRs in national economic and technological policies. While it is acceptable for patent holders to profit from their inventions, this must be balanced against the need to avoid abusive practices that can stifle innovation and broader technological access.

3.2. Strategic Patent Practices and the Evolution of Patent Territoriality in Developed Countries

Developed countries and related enterprises with technological advantages have begun to utilize patents to construct trade barriers in line with international rules in order to maintain their technological leadership and gain excessive profits, which can be described as a legitimate malpractice [8]. It is a kind of self-protection policy for developed countries that hold a large number of intellectual property rights, but it has a negative impact on the overall global economic efficiency and scientific and technological progress. For developing countries, it is a certainty that they will face all kinds of restrictions in the short term, but in the long term it is also a kind of incentive for their own scientific and technological innovation capacity.

The territoriality is not an essential attribute of the patent right, the lack of territoriality of the patent right is still a patent right [9]. Patent territoriality theory has been broken by some countries and regions. With the optimization of the political, economic and cultural environment, the

disappearance of the territoriality of the patent is inevitable. The breakthrough of the traditional jurisdiction system of patent right in developed countries comes from the need of practice [10,11]. The emergence of foreign patent disputes, especially in foreign patent infringement cases in the traditional jurisdiction system for the right to relief, is the direct impetus for some developed countries to change the system.

3.3. Case Study: Wireless Planet v. Huawei

Take Wireless Planet v. Huawei as an example. One of the points of contention in the case was the jurisdiction of the SEP dispute, the scope of the FRAND license, and the antitrust issues behind it [12,13].

In the UK litigation, Judge Burns asserted that a global license was the only resolution compliant with FRAND principles due to its efficiency in standardizing patent licensing across borders. Conversely, Huawei challenged this decision, arguing that the territorial limitations inherent to patent rights should preclude a UK court from mandating a global licensing agreement. Huawei maintained that such a directive exceeded the court's jurisdiction, advocating for a licensing scope restricted to the UK patent portfolio only.

For Wireless Planet, transaction efficiency is indeed ensured and transaction costs are reduced. However, for Huawei, the total transaction costs are likely to increase materially. What's more, the issue of economic efficiency should not be as important as the fairness and correctness of the trial in most cases, and therefore should not be considered as a decisive factor.

The right to profit is territorial in nature and the rights conferred by a patent are limited to the country and territory in which the patent was granted. Mr. Justice Burns, although recognizing this, was in essence suspected of taking the initiative to seek global jurisdiction. One of the underlying logics of the English court's belief that it had the right to agree with the judgment was that Judge Burns believed that the global license in this case was the only FRAND license. However, first of all, the field of international trade should pay attention to the principle of voluntariness, the principle of good faith, and respect for the true expression of meaning of both parties. A global license is only valid if it is based on the consent of both parties, whereas the present case is essentially a compulsory global license; secondly, when the initial consent of both parties cannot be confirmed and a third party such as the court is required to determine the global license, the specific circumstances of each case must be taken into account, whereas in this case following the view of Mr. Justice Burns is clearly not in line with the interests of balance.

It is thus clear that territoriality and jurisdiction should not be breached arbitrarily, at least under the current imperfections in the international intellectual property litigation mechanism. Although the breakthrough of territoriality and traditional jurisdiction in the field of international intellectual property is an inevitable trend, it should not be rushed under the current conditions. The field of intellectual property is almost naturally related to innovation and high technology, so at present there is a clear inequality of status between developed and developing countries in this field. Thus, establishing fair and equitable international rules remains challenging. In some instances, maintaining certain interstate restrictions could provide a protective mechanism against these inequities. Therefore, a more cautious approach to altering international IP laws and practices is advocated to avoid precipitating further imbalances.

4. China's Legal Strategies Against Patent Abuse under the Global Context

4.1. the Antagonism between the Status of Developed and Developing Countries in the Field of Intellectual Property

Developed countries undoubtedly take the lead in the field of intellectual property and have an absolute advantageous position. Developing countries, on the other hand, are the opposite. The disparity of status, non-uniformity of interests and opposing positions inevitably lead to differences

in the provisions of intellectual property laws of various countries, and are also the reasons why it is difficult to reach an effective and extensive relevant international treaties at present.

For example, China believes that parallel importation is legal because it supports the view that patent exhaustion should be global in scope; while many developed countries believe that exhaustion of rights is limited to the domestic context and therefore do not favor the practice of parallel importation. Furthermore, developed countries have a clear tendency to extend the duration of IPR protection; developing countries do not have such a pressing need, and there is an element of passive extension for the sake of integration into international rules.

There have also been many disputes between the parties regarding generic drugs. When a patented drug is about to exceed the patent protection period, manufacturers of generic drugs usually prepare in advance in order to get their products on the market as soon as possible. The government, in turn, endorses the use of patented drugs or medical devices for the benefit of the community at large in order to provide the information needed for approval. This exception to patent infringement is known as the Bolar exception and originated in the United States. However, companies in developed countries, which hold a large number of patented drugs, often block the launch of generic drugs in developing countries by cleverly applying for new patents.

Additionally, as already mentioned, developed countries try to take the initiative in jurisdiction. For one thing, in international litigation of intellectual property rights, developed countries usually act as plaintiffs. They want to vigorously defend their own interests. Secondly, while leading in innovative products, developed countries have a better legal system related to intellectual property rights. Developing countries, on the other hand, usually act as defendants and accept the outcome of decisions made by developed countries.

4.2. Comparison between China, the United States and Japan

4.2.1. Comparison between China and the United States

In the United States, there are two main ways to regulate the abuse of patent rights, one is the principle of abuse of patent rights, and the other is the antitrust law. The U.S. is the first country in the world to establish a complete anti-trust system to control the restriction of competition. The antitrust law of the United States consists of a number of bills, including the Sherman Act, the Clayton Act and the Federal Trade Commission Act, with the Sherman Act and the Clayton Act being the foundational statutes for antitrust law.

China has developed a multi-faceted approach to address the abuse of patent rights, incorporating several key legal frameworks. Firstly, the Contract Law includes provisions that prevent the abuse of contractual terms related to patent licensing, ensuring that such agreements are fair and equitable. Secondly, the Regulations on the Administration of Import and Export of Technology provide guidelines to prevent the exploitation of technology transfer agreements, protecting domestic entities from unfair practices by foreign patent holders. Thirdly, the Anti-Monopoly Law plays a critical role by targeting anti-competitive behaviors that involve the misuse of patent rights, such as patent pooling or excessive pricing. Additionally, other relevant laws and regulations further bolster this framework by addressing specific issues related to patent abuse, thereby creating a comprehensive legal environment aimed at fostering innovation while protecting against the misuse of intellectual property rights.

4.2.2. Comparison between China and Japan

The evolution of intellectual property laws in Japan and China highlights contrasting approaches influenced by historical and political contexts. In the second half of the 19th century, international trade flourished, the global significance of intellectual property rights became increasingly evident. Developed countries, including Japan, took proactive steps to enhance IP protection, while China and other developing countries were more passive.

In the face of the aggression of Western forces, Japan carried out the Meiji Restoration and adopted the policy of learning from the West. Japan has made great progress in intellectual property law by

learning from the advanced technology, business management and legal system of the West. As Yukisaku Yoshito, a scholar of Japanese patent law, said, “The general trend of these patent laws, regardless of any amendment, is to internationalize [14].”

On the contrary, China adopted the policy of “closed-door policy” during the Qing Dynasty. Until the end of the Qing Dynasty, the trademark law and copyright law were enacted one after another, but the patent law was not enacted. After the founding of the Republic of China, although the patent protection laws were enacted one after another, almost all of these laws did not effectively protect the patent rights of foreigners. It was not until Deng Xiaoping led China to reform and open up that he began to gradually pay attention to the internationalization of patent law.

Reflecting on this historical comparison, China's conservative approach can be seen as both a hindrance and a necessity. Excessive conservatism led to initial setbacks in international trade and technology exchange. However, China's unique political and economic circumstances at the time necessitated a cautious approach. Today, it is clear that while developing countries may face increased production costs and initial challenges, overly closed policies can isolate them from international advancements and collaborations. Therefore, intellectual property rights should be balanced, avoiding both abuse and excessive self-protection.

4.3. Legal Strategies Against Patent Abuse in China

In response to the challenges posed by patent abuse and the disparities between developed and developing countries in the field of intellectual property, China can adopt a series of targeted legal strategies.

China should tighten its patent approval criteria to ensure that only genuinely innovative and valuable inventions receive patent protection. This involves enhancing the examination process for novelty and non-obviousness and implementing more stringent pre-grant opposition mechanisms. By reducing the likelihood of granting overly broad or vague patents, China can limit opportunities for patent trolls to exploit the system.

To curb the misuse of patents, particularly those that lead to monopolistic practices, China should refine its anti-monopoly laws. This includes clearer definitions of what constitutes patent abuse and stronger penalties for such abuses. Specific focus should be placed on critical sectors like pharmaceuticals and technology, where patent exploitation can significantly impact public welfare and economic stability.

Moreover, developing specialized IP courts with judges trained in both legal and technical aspects of patent law can improve the adjudication of complex patent cases. This ensures more consistent and informed decisions, especially in disputes involving advanced technologies or nuanced interpretations of IP laws. Enhanced judicial expertise will contribute to fairer and more efficient resolution of patent disputes.

Furthermore, oncreasing transparency in the patent litigation process can deter abusive practices by making it more difficult for entities to engage in unjust legal actions without scrutiny. Publicly accessible databases of patent litigation histories and outcomes, along with detailed judicial opinions, will help businesses and legal professionals navigate the patent enforcement landscape more effectively.

Lastly, China should actively engage in international dialogues and treaties aimed at harmonizing patent laws and preventing abuse. Collaborating with global organizations like the World Intellectual Property Organization (WIPO) and participating in bilateral and multilateral agreements can ensure that cross-border IP issues, particularly those involving patent abuses, are managed effectively and equitably.

5. Conclusion

The legislative goals of IPRs between developed and developing countries are inherently antagonistic due to their differing economic needs and stages of technological development.

Developed countries leverage robust IP frameworks to protect their technological advantages, often resulting in practices that can hinder the progress of developing nations. These practices, while legally defensible, can border on monopolistic behavior and stifle competition and innovation in less developed markets.

The inherent inequalities between developed and developing countries necessitate a cautious approach to changing norms of territoriality and jurisdiction in international IP litigation. While the trend towards diminishing territorial constraints in patent rights is inevitable, it must be managed carefully to avoid exacerbating existing imbalances.

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