



Research on whether the infringement of patent rights should be bound by criminal law

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ABSTRACT

In the context of the fourth Internet industrial revolution, more emphasis on patent rights has also become the theme of the times. A patent may become an industry standard or become an industry entry barrier. Increasing the emphasis and protection of patent rights is the need of the times and the perfection of the legal system. However, excessive attention and protection of patent rights may hinder the progress and development of the times, lose the original intention of patent protection and the original meaning of establishing patent law in the first place. Throughout the world's patent legislation system, there are huge differences between countries around the world about whether the infringement of patent rights should be criminalized. My thesis hopes to clarify the academic arguments, analyze the patent right and the nature of patent infringement, compare the legislative practice of other countries, and put forward my own understanding and opinions on the strength of patent protection.

The thesis is divided into five chapters:

The first chapter is the introduction. This chapter elaborates the research background and significance of this paper and points out the importance of patent protection.

The second chapter is the analysis and research on the Chinese patent legislation system, which is divided into the history of China's patent legislation, aiming to review the original intention of patent protection from a historical perspective; and the analysis and research on the patent legislation system in Taiwan, China, to clarify the legislative origin and legislative purposes.

The third chapter sorts out the legislative system of patent protection in different countries, analyzes the legislative purpose and the rights object to be protected, and clarifies the different strength of patent protection.

The fourth chapter analyzes and clarifies whether the violation of patent rights should be protected by criminal law. Analyze the positive and negative effects of the patent protection system, clarify the views of the academic circles; and point out the enlightenment generated by different patent criminal legislations in different countries, and provide effective insights into the Chinese patent protection system.

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Chapter one Introduction

What kind of rights is the patent right? Sicheng Zheng, a professional jurist, holds that the patent right does not originate from any kind of civil right, nor does it originate from any kind of property right. It originated from the "privilege" of feudal society. This privilege may be granted by a monarch, or by a feudal state, or by a magistrate representing the monarch. This origin not only determines the unique regional characteristics of the patent right, but also determines the "monarch's control over the mind", the control of economic interests, or the monopoly of the state in some form. Mr. Huaishi Xie also wrote: "Intellectual property rights (patent rights, trademark rights, copyrights) is a unity of civil rights that are still expanding, with specific intellectual property as objects." Throughout the legislative history of patent rights, although the patent right is gradually classified into the field of intangible property rights in modern times, its source is not pure civil property rights. The protection of patent rights by law is more like an exchange relationship, a compromise relationship that balances the potential benefits of human wisdom with the protection of the inventor's personal interests. Through legal process to determine the intangible property rights of the inventor, it can protect the inventor's legal monopoly power, and maintain the enthusiasm of invention and creation; and it can made inventor's achievements public in time, preventing others from repeating the same research and avoiding the waste of human resources, promote economic and social development. From above, we can conclude that how to protect patent rights and which kind of protection is needed should be very important. And that is what I want to expound in the thesis.

Chapter two The current Chinese's patent system and its history

2.1 China's relevant legal provisions on the protection of patent rights

Article 216 of the Criminal Law stipulates that "when a patent is impersonated, if the circumstances are serious, it shall be sentenced to fixed-term imprisonment of not more than three years or criminal detention, parallel or single penalty."

Article 220 of the Criminal Law stipulates that "the company that commits the crimes stipulated in Articles 213 to 219 of this section, shall be fined and the manager directly responsible for it and other directly responsible persons shall be

punished in accordance with the provisions of this section."

Article 60 of the Patent Law (2008) stipulates that "without the permission of the patentee, the implementation of its patent, that is, infringement of its patent right, causing disputes shall be settled by the parties through negotiation; if it is unwilling to negotiate or not settled, the patentee or The interested party may file a lawsuit with the people's court or may request action from the department that manages the patent work. When the department that manages the patent work handles the case and determines that the infringement is established, the infringer may be ordered to immediately stop the infringement; if the party refuses to accept it, it may file a lawsuit with the people's court in accordance with the Administrative Procedure Law of the People's Republic of China within 15 days from the date of receipt of the notification; if the infringer fails to prosecute and does not stop the infringement, the administrative department of patents may apply the people's court to enforce it. The administrative department of patent processing shall, at the request of the parties, mediate the amount of compensation for infringement of the patent right; if the mediation fails, the parties may file a suit in a people's court in accordance with the Civil Procedure Law of the People's Republic of China. "

Article 63 of the Patent Law (2008) stipulates that "when a patent is impersonated, other than legal civil liability, the department that manages the patent work shall order infringer to correct and announce the case, and the illegal income shall be confiscated, and a fine of less than four times of illegal income may be imposed; If there is no illegal income, a fine of less than 200,000 yuan may be imposed; if a crime is constituted, criminal responsibility shall be investigated according to law."

Article 84 of the "Implementation Rules of the Patent Law" (2010) stipulates that "the following acts belong to the act of counterfeiting patents as stipulated in Article 63 of the Patent Law: (1) labeling patents that are not patented on products or on their packaging. After the patent is invalidated or terminated, the patent label is still marked on the product or its packaging. Label other people's patent numbers on the product or product packaging without permission; (2) sell the products mentioned in item (1); (3) In the product specification and other materials call the technology or design that has not been granted patent technology or patent design, or the patent number of another person is used without permission, so that the public mistakes the technology or design involved as a patent; (4) forging or altering patent certificates, patent documents or patent application documents; (5) Others actions that confuse the public and mistake the technology or design that has not been granted a patent right as a patented technology or patent design. Before the termination of the patent right, it is not a

counterfeit patent act to mark a patent mark on a patented product, a product obtained directly according to the patented method or its packaging, and promise to sell or sell the product after the termination of the patent right. If the sales do not know that it is a counterfeit patent product and can prove the legal source of the product, the department that manages the patent work orders to stop the sale, but the penalty for fines is exempted. ”

2.2 Patent Legislation System in China's Taiwan region

Article 84 of the Taiwan Patent Law stipulates the content of the claim for damages, Article 85 provides the calculation method for damages, and Article 86 stipulates the contents of the infringement and compensation of infringement. It mainly stipulates the standards for defining patent infringement and the compensation standard and time limit. In the current Taiwan Patent Law, criminal punishment has not been seen. But in history, Taiwan has carried out large-scale criminal protection of patent rights, while the abolition of criminal protection is step by step.

The current Patent Law in Taiwan China is the Patent Law promulgated by the National Government in 1944 and implemented on January 1, 1949. The corresponding Regulations were promulgated in 1947 and implemented on January 1, 1949. Among them, the corrections were the largest in 1986, 1993, 1997 and 2002. In 2003, China's Taiwan region completely abolished patent penalties and replaced them with civil litigation. Before 2001, the Patent Law set up as many as 11 crimes against patent rights. When the law was amended in 1994, the free penalty for infringing invention patents was abolished; when the patent law was amended again in 2001, the criminal law for infringement of invention patent fines was abolished. In other words, infringement of invention patents does not apply to criminal liability. Therefore, in the legal provisions of the Taiwan region, the infringement of invention patents was settled by civil litigation. However, if the utility model or design patent was infringed, the criminal liability was violated, and this kind of serious imbalance was repeatedly criticized. In 2003, the Legislature decided to abolish the criminal liability for infringement of new patents and new-style patents, and abolish all criminal infringements and completely return to civil. Since the implementation of the new law, cases of patent infringement have been completely resolved by civil proceedings, and prosecutors have no longer accepted patent infringement cases.

In the process of amendment of the patent law, the Legislature has had heated debates. Some commentators believe that Taiwan's patent infringement is no longer subject to criminal penalties based on public policy considerations: First, whether the patent infringement is subject to punishment. According to the legal

system of each country, civil remedies are mostly. Article 61 of the World Trade Organization's Trade-Related Smart Property Rights Agreement (WTO/TRIPS) allows countries to decide whether patent infringement is criminally sanctioned and is not mandatory. Second, because the invention patent itself involves complex technical and legal expertise, it is difficult to judge whether it is infringement. According to the industry, in practice, there are often criminal sanctions to obtain high royalties, which inevitably leads to unfairness. Therefore, it is advisable to solve the problem by private rights. The parties themselves shall agree on the rights on the basis of a more equal basis, based on market supply and demand and freedom of contract. Third, in order to strengthen the protection of the patentee, at the same time as the abolition of the penalty, the court will increase the maximum amount of punitive damages for the civil damages of the discretionary damages based on the infringement. And this punitive damages is not only applicable to infringing the invention patents, but also the new and new style patents. However, some commentators strongly oppose the abolition of the patent infringement section, and believe that from the perspective of penal theory, it should constitute a crime, and the perpetrator should be punished. Specific reasons include: First, in the penalty pattern, the free penalty is most in line with the modern penalty theory. Since the patent law has clearly stipulated that the intentional infringer is the normative object, in order to satisfy the sense of social justice, the infringer will be educated and disciplining the public to not infringe patent rights, it is not inappropriate to carry out a free sentence. Second, penalizing infringers is one of the effects of penalties. According to the modern penal theory, it is the purpose of penalties to curb the public to engage in criminal acts. Under this premise, free penalties can achieve this goal better than fine penalties. Third, in terms of improving the patent system, the purpose of the patent system is to encourage invention and creation, so as to enhance the technological level of the industry. In principle, the two complement each other and interact; however, conflicts between the two may not be ruled out, such as the abuse of rights by patentees. Therefore, while giving the patentee exclusive rights, it has been subject to considerable restrictions. On the other hand, appropriate protective measures should be given - civil criminal relief, protection of rights holders from others, and reasonable compensation when violations occur. In this way, it is sufficient to balance the weight of the two items mentioned above.

In the end, the Legislature adopted the abolition of the penalty for patent infringement. Members of the Legislative Council reached a consensus on the idea of abolishing the penalty: criminal punishment does not help the flourishing

development and quality progress of the invention, but increases the operating cost of the industry (such as: paying huge sums of money to avoid patent criminal proceedings). Moreover, the judicial police specifically do investigations for private economic interests of the right holders, resulting in waste of social costs and making the society pay a huge price. The liability of patent infringement is lower than that of ordinary criminal law. The development of high-tech research is not easy to determine whether there is any infringement of patent rights, and the punishment will kill the research will of the scientific and technological community. Therefore, in the amendments to the Patent Law of 2003 in Taiwan, the criminal responsibility of the patent system was abolished and replaced by civil litigation.

Chapter three Research on Patent Protection System in Other Countries

The patent system sprouted in the United Kingdom in the 13th century, when the Royal British granted a monopoly on a new invention or a new technology introduced in the UK for a certain period of time. This kind of franchise rewards people who are technically innovative and bring benefits to society. In the fifteenth century, trade exchanges along the Mediterranean coast became more developed. In order to attract talents with advanced technology, many countries began to establish a legal system to protect new technologies. In 1474, the veteran of the Republic of Venice City promulgated the world's first patent law, although there are not many legal texts, but the outline of modern patent law has been outlined. In the 16th to 17th centuries, the industrial revolution swept through Europe, and the United Kingdom enacted the Monopoly Act in 1624, which is considered to be the world's first patent law with modern significance. Subsequently, the United States established the principle of patent protection in the Constitution, and enacted the patent law in 1790. France enacted the patent law in 1791, Russia in 1812, Spain in 1826, and Germany in 1877. The historical evolution of the patent system is accompanied by the development of production and the advancement of science and technology. In a sense, the birth of the patent system and the birth of the patent law are the inevitable result of the choice of the legal system of human society, and the necessary process for the development of human history.

3.1 Research on British Patent Legislation System

Articles 109 to 113 of the British Patent Law stipulate the case of patent crimes, Article 109 stipulates the contents of the registration of the book, Article 110 stipulates the content of the patent right for unauthorized use, and Article 111

provides for the unauthorized claim that in the content of the patent, Article 112 stipulates the abuse of the content of the "Patent Office", and Article 113 stipulates the content of the company's violation of the law. It can be seen from the provisions of the law that the UK's criminal penalties for patent rights are limited to falsification in the patent register, unauthorized possession of patents, and abuse of the name of the "patent office", which are all actions that deceived the public. Its formulation of such a legal system is closely related to the country's cultural and legislative logic, so we need to find the reasons for its legislation from a historical perspective.

From the thirteenth century onwards, the United Kingdom has rewarded people who have helped the development of the social economy and the improvement of the country's strength in the form of Letters Patent. In the early literature on the origins of the patent system, the concept that people used more often was "monopoly." The enactment of the Monopoly Act in the United Kingdom in 1624 was considered the basis of the British Patent Law and became the beginning of the establishment of the world-wide patent system.

In the United Kingdom, the practice of managing the country's business activities by the royal family through the issuance of "charters", "letter patents" and "close letters" was first published in the form of royal administrative orders. In the eleventh century, trade unions began to appear in the UK, and these trade unions were monopoly organizations licensed by the kingdom. The earliest commercial trade union charter was given the privilege of exclusively selling products produced by its members in specific towns. In order to adapt to the needs of the development industry, and to compete with the more advanced industrial countries of the European continent at the time, Edward II (1307-1327) and Edward III (1327-1377) also used some methods to encourage European mainland technicians to settle in the UK, and operate the industry safely and freely in the UK. For example, abolishing of the rule that foreigners are not allowed to operate in the UK, and granting patents(monopolize business privileges) to newly-examined technicians as rewards. In fact, the earliest patent disclosure document was a "passport" issued to anyone who wanted to establish an industry in the UK, allowing foreigners to enter the UK with new technology and establish a brand new industry.

In the 15th century, the Red and White Roses broke out in Britain, and the Tudor dynasty established on the ruins entered the period of centralized feudal autocracy. Henry Tudor has become the real monarch after agreeing with the "protection of normal business expansion" and "eliminating civil strife". During the reign of the Tudor dynasty, capitalism sprouted and was fostered, and the

mercantilist economic policy of protecting industry and commerce was implemented. The urban commodity economy was greatly developed. In the 16th century, Queen Elizabeth I also used the method of granting exclusive franchise rights to protect patent rights, in order to encourage foreign craftsmen to import foreign advanced technology and products into the UK, develop their national industries, and change the status of British raw materials exporting countries, encourage the export of industrial products in the country. Therefore, we can conclude that the origin of the patent law of the Anglo-American legal system has nothing to do with legal privilege or invention creation. Its essence is only the privilege granted by the royal family to support its political strategy. Its function is only to encourage the introduction of new technology and establish a brand new industry in the kingdom. However, when the royal family saw that this way of granting the inventor exclusive business privilege could bring extra profits to the them, it gradually began to abuse this privilege, which gradually made the patent system abused and became the bounty of the royal family. The monopoly of many products is given to a very small number of people, who then sell them to merchants. In the era of Elizabeth I and the Queen's heir, James I, this abuse reached its peak. Not only patented some outdated technology, but also oil, salt, vinegar and starch that are closely related to people's lives. Therefore, the function of the patent system as a new technology has been greatly reduced and become a tool for royal appreciation. This is very different from the initial patent system. The patent system rarely emphasizes the original purpose of introducing new industries. At the same time, such monopolistic rights also create dissatisfaction with enterprises and people who have to pay high prices or reveal unreasonable trading conditions to purchase various products and people's daily necessities, and form public grievances. Therefore, the British Parliament began in 2006 to advocate the national abolition of this monopoly system.

In the seventeenth century, the British courts first sentenced the validity of royal patents in the early seventeenth century. This famous case was the Darcy v. Allen monopoly that ended in 1603. The case was caused by the British monopoly patent issued by Edward Darcy in 1598 for the production, sale and import of playing cards. Darcy filed a patent infringement lawsuit in court in 1600 due to the defendant's infringement of playing cards. In this case, the defendant's agent, Fuller's debate on legal monopoly and illegal monopoly, became the legal classic of patents: "Anyone who stimulates a new domestic industry through inventions created by his own expenses and labor, or through his own knowledge, or by promoting the domestic business through the means that he has never had in the past, when the invention is used by a general national, the king may grant a patent

to the inventor based on the contribution of the inventor at an appropriate time. In any other case, the patent may not be granted." This principle of judgment was confirmed by the court, which declared that the abuse of patent privileges by the King was contrary to the common law. This case has extremely important historical significance. It is the court's first restriction on the discretion of the King to grant patent privileges to the public, and it is the beginning of the patent system in the UK. However, after the British King James I took the throne, the number of illegal patents still increased greatly. Due to the pressure of all parties, the Monopoly Law was enacted in 1623, which mainly emphasized the acceptance of the patent concept already existing in the English common law. The purpose is to abolish all monopoly rights that the King has granted, and to prohibit the King from granting such rights in the future. But as an exception, the king is allowed to grant a monopoly to the real first inventor of the new product. Article 6 of the Act states: "It is hereby declared and stipulated that: any of the foregoing declarations shall not be extended and in the future the real first inventor of any new product shall be granted a patent certificate and privilege to exclusively implement or manufacture the product in the country for a period of time. For 14 years or less, when a patent certificate or privilege is granted, others may not use it without their permission. Granting such a certificate and privilege shall not violate the law, nor may it raise the price to damage the country, undermine trade, or cause general inconvenience. The above 14 years shall be calculated from the date of granting the first patent certificate or privilege in the future, and the certificate or privilege shall have the effect before the enactment of this Law." The provisions of this monopoly law are the first statute law of the United Kingdom on the patent system. Its effectiveness is to limit the privileges granted by the King to a particular aspect. It is a summary of the common law principles already existing in the UK, and included the English courts' judicial review, established by case, of patents granted by the King. Although the Monopoly Law came into effect, the British patent system still retained a large number of informal administrative law features, and the number of patents granted at that time was small.

In the period of industrial revolution, the patent system was re-emphasized due to the rapid development of science and technology. A major change is the increasing rigor of patent applications. The inventor is required to provide a patent specification that clearly and completely describes what he invented, emphasizing the information function of the patent system. This is a major change in the economic role of the patent system, from emphasizing the introduction of new processes to the introduction of new and useful technical information. This microsecond change in the patent system actually reflects the shifting role of

patents in economic operations: a technology that brings useful end products to society and a valuable message. A tool to promote technological prosperity.

What must be mentioned here is the 19th century patent abolition campaign. People at the time believed that all laws that support and protect monopoly must be sinful. The representatives who hold the patent system abolition theory believe that the patent system not only creates a monopoly, but also violates the principles of "freedom of trade" and "freedom of contract", which has adversely affected the normal market order of society and has also aggravated the phenomenon of unemployment. The rise in prices has hurt the long-term interests of the country and the people. The theoretical basis is derived from the theory of free trade, mainly influenced by the economists Adam Smith and Ricardo's international free trade theory, against trade protectionism, and advocates that competition is completely unconstrained. Although the patent abolition campaign was huge at the time, with the reform and development of the British patent system and the need for international competition at that time, the patent system became more and more adapted to the development of society, so it only lasted for less than 20 years before exited the stage of history. At that time, it was argued that in today's highly competitive technology, even without the artificial system of the patent system, technology is still developing naturally. This idea may be able to stand up during periods when technology is still underdeveloped. However, the abolition of the patent system will inevitably lead to unfair competition, and the result of competition will undoubtedly be the invention's benefit went to those who have strong capital, which is an Achilles heel of the abolition theory.

In the second half of the 19th century, with the development of science and technology, the world's major capitalist countries have established patent systems. International exchanges are becoming more frequent, international trade is developing more and more rapidly, and exchanges and interactions of high-tech products from various countries are increasing. After realizing that international exchange of technology can promote domestic economic development as well as the level of scientific and technological development, the exchange of patent information mentioned above has begun to occur and develop in countries around the world. Based on this background, international treaties such as the Paris Convention, the European Patent Office and the Patent Cooperation Agreement have been gradually signed, and the British patent system has become international. However, throughout history, the main tone of the British patent system has been laid. On the one hand, the United Kingdom needs a patent system to stimulate inventions and promote social progress. On the other hand,

it cannot create monopoly and hinder economic development. Therefore, legislators must be cautious when formulating patent laws to avoid breaking the balance between the patent system and monopoly.

The British legal profession has always had the opinion that the establishment of the patent law is to serve the development of the economy, that is, the development of economic theory. The doctrine holds that the establishment of the patent system is not only to protect the rights of inventors, but its fundamental purpose is to develop the national economy. The British Patent Law does emphasize the social utility while protecting the rights of inventors. The doctrine originated from the theory of utilitarianism, which was proposed by the British philosopher Hume and carried forward by Jeremy Bentham and others. Hume believes that justice, that is, the law is not based on rationality, "the emotion that makes us establish the law of justice is the concern for our own interests and the public interest." According to this theory, the patent law should pay attention to the balance between personal interests and social welfare while protecting the exclusive right of the patentee. Because the granting of patent rights can give these rights holders a monopoly interest in a certain period of time in the market economy environment, this can actually play a role in encouraging people to engage in inventions and creations; and the birth and industrialization of high-tech can objectively stimulate the development of the economy, which has been proved by the history of the development of patent law.

3.2 Research on American Patent Legislation System

Article 292 of the US Patent Law stipulates the content of the false identification. The United States Code, Volume 18, Section 1001 (18 USC 1001) stipulates the content of the general statement or entry, that is, the regulations of the false written documents and fictitious fraudulent entries. It can be seen from the provisions that the US Patent Law does not impose criminal sanctions for the practice of patents without permission. Civil remedies are imposed in the Patent Law, Article 283 Ban, Article 284 Damages, and Section 285 Attorneys' Fees. The reason for this is based on the theory that copyright and trademark rights are manifested in the public. Violating these two rights not only harms the rights of the right holders, but also deceives the public in many cases; It is not that any civil compensation can be resolved, it must be handled through administrative and criminal methods. Infringement of patent rights is different. It does not deceive the public, but merely harms the interests of the right holder. In most countries that do not pursue criminal liability for patent infringement, the Patent Law has provisions for criminal sanctions for other illegal acts involving patents. But it is clearly distinguishable from 'infringement'. To explore the reasons for the

establishment of such a system, it is necessary to review the history of the formulation of the patent system.

Between 1640 and 1776, the British introduced the patent system to the colonies of North America, which was the earliest germination of the US patent system. At that time, the British colonists adopted the patent practice of encouraging inventions in order to stimulate the development of the colonial industry. Therefore, the colonial prevailing exclusive privilege of granting inventions or introducing technology for a certain period of time, this is the impact of the British patent law on the colonies. This precedent for granting inventions a certain period of exclusive rights in the colonies affected the state-owned patent system and federal patent regulations and patent systems during the Confederacy period after the American War of Independence, and to a certain extent encouraged the subsequent patent provisions listed in the Constitution.

After that, the United States established an independent and unified country after the War of Independence. At the time of the initial constitution, the state representatives at the Constitutional Convention unanimously passed the patent clause, which laid the foundation for the adoption of the first unified federal patent law in the history of the United States in 1790. This is also the patent practice of the United States for more than one hundred years, the patent system was fixed for the first time in the form of a statute. When the US Constitution was drafted in 1787, the first industrial revolution in Europe reached its peak. The social impact of the patent system in the United Kingdom had a major impact on the United States, which was formerly a British colony. These effects are also directly reflected in the formulation of the US Constitution. At the same time, before the Philadelphia Constitutional Convention in 1787, the shortcomings of the US state granting patent rights were already very obvious. Interstate trade is constantly evolving, but the state granting patents have geographical restrictions. A patent requires patent protection in multiple states and faces the problem of the first inventor. Therefore, it is necessary to uniformly grant patent rights by the Congress, and it is necessary to stipulate uniform standards, principles and deadlines for granting patent rights. Representatives of the Constitutional Convention have gradually recognized the necessity of including patent clauses in the Constitution. In April 1788, after the entry into force of the US Constitution, Congress was given the power to grant patents. The US Congress passed the first patent bill on February 6th, 1790. The bill was signed on April 10th by the first president of the United States, President Washington. The inaugural speech in Washington also promoted the formation of US patent law to a certain extent. On January 4, 1790, when the second meeting of the first Congress was held,

Washington delivered the inaugural speech, which stated that "the agriculture, commerce, and creative industries need to adopt appropriate methods to promote their development, which is needless to say. I have to explain to you that it is equally beneficial to strongly encourage the introduction of new and useful inventions from abroad and to encourage the use of talents to produce these inventions in the country." In his inaugural speech in Washington, he emphasized the encouragement of implementing new inventions in the country to develop the national economy. And the formulation of the patent law should be conducive to the introduction of foreign invention technology. The speech of Washington caused resonance between the two chambers of Congress, and the first patent law in the United States was born in this environment.

After that, the US patent law was amended several times, including the second patent law in American history passed on February 21, 1793. The biggest modification of 1793 Patent Law was to change the conditions for granting patents from censorship to registration. And the 1836 Patent Law, which provides for a more advanced patent examination system and stipulates some substantive aspects, laying the foundation for the modern American patent system.

In the 20th century, the US national patent system was gradually improved, the size and number of American companies continued to increase, and the joint strengthening of enterprises was strengthened. As a result, patent alliances and patent trust organizations between enterprises began to appear. Both the patent alliance and the patent trust organization are just a form of business organization. Two or more companies combine their respective patents and obtain the other party's patents. Equivalent to cross-licensing between companies. In this way, companies can not only use each other's patents, but also avoid patent infringement, and maximize the value of patents. This kind of alliance has continued to develop, and eventually there has been a phenomenon of monopoly in the industry. For example, the joint shoemaking machinery company established in 1899, with its patent rights, almost completely controls all the production equipment used in the entire American footwear industry. With the patent union's restrictions on product prices and trade, the United States began to realize that the "legitimate monopoly" in the patent law conflicts with the purposes and principles of "encouraging competition and opposing monopoly" in antitrust law. And began to pay attention to the patent trust phenomenon, and gradually take measures to control it. Although the US Congress passed the first The Sherman Act in 1890, before the Clinton Act was passed in 1914, the attitude of the US courts to patent monopoly was relatively tolerant and even conniving. This is mainly because the development of the economy is the basis and purpose

of the US government's legislation in the period of rapid industrial development. However, the indulgence of economic development has finally led to the emergence of an economic crisis, which has also changed people's perception of the patent system.

In 1920, the first economic crisis broke out in the United States. The society was full of contradictions and instability. The Roosevelt New Deal was implemented in this context. Under the influence of the New Deal, the court's attitude towards the patent system changed, and the patent law was considered a means of increasing monopoly, which had a very negative impact on trade and commerce. Since the 1930s, there has been an anti-patent campaign that lasted for more than 50 years, and it was only moderated in the 1980s. This period was also called the "anti-patent period". Judicial interpretation made many anti-monopoly restrictions on the implementation of patent rights, and regarded the exclusive license of patents as unfair competition, which led to the majority of authorized patents in patent litigation cases being judged as invalid.

In the 1980s, the United States began a patent war with Japan. In the ten-year patent battle between the United States and Japan, the United States has achieved a very rich harvest. In this patent war, the United States has collected a large amount of settlement fees, usage fees, and licensing fees from Japan. It was also during this period that the United States had a new understanding of the patent system. When President Reagan came to power in 1981, the United States was in a serious economic recession, and Reagan adopted a new economic policy with the main goal of stimulating aggregate supply. The US patent policy has since changed. Under the slogan of "Reviving the United States" proposed by President Reagan, the Reagan administration introduced an antitrust policy called "partial patents". The main content is to expand the scope of patent rights, paying attention to the rate of patent royalties and increasing the infringement compensation fees. The antitrust policy adopted by the Reagan administration for "biasing patents" changed the way the judicial department used antitrust laws to restrict businesses. This greatly encouraged the company to commercialize the patent as the patent owner and to maximize the protection of the company's economic interests. This is also the origin of the current US patent system.

This is the history of the development of the US patent system so far. The development history of the US patent system is a process of gradual commercialization, but the original intention of the patent system as an incentive for economic development has not changed. In fact, as early as the beginning of the rise of the patent system in the United States, the doctrine of the dominant intellectual property rights was the "encouraging mechanism," which Jefferson,

one of the fathers of the founding of the United States, pursued. He refused to accept the "natural rights theory" in intellectual property and clearly recognized the relationship between the patent system and the social economy. He believes that patent monopoly is not designed to protect the inventor's natural rights. The invention of the exclusive right is an artificial social design and is not a natural God-given right. Its purpose is to induce people to create more new inventions and new knowledge. That is to say: intellectual property rights are rights granted by the state and the law for a certain purpose, and may or may not have limited exclusive rights for certain intellectual labor results, solely based on specific needs of the state, law or society. And as determined, the individual who is the creator of the intellectual achievement has no right to make a decision on this. Jefferson said: A stable ownership system is a product of social law and is generated in the late stages of social development. However, as an idea of the individual's brain products, it is doubtful whether it can claim exclusive and stable property rights as a natural right. Society can give certain exclusive rights to the proceeds of inventions to encourage people to pursue ideas that inventions can produce practical results. Obviously, society can grant or not grant such rights according to their wishes and conveniences, and ignores anyone's claims and complaints. In fact, the US federal constitution and judicial decisions have the "incentive theory" as the primary role of the rationality of the patent system. For example, the Supreme Court explained in the classic case *Mazer v. Stein* [347 US 201 (1950)]: "The economic rationale behind the terms that authorize Congress to grant patents and copyrights is the conviction that by giving authors and inventors exclusive rights in the field of 'scientific and useful technologies', they can use their talents to improve public welfare. The days of sacrifice for this creative activity should be paid in proportion to the labor that is contributed." At the same time, we have to admit that even the US President Lincoln's sentence: "The Patent system added the fuel of interest to the fire of genius." is also the best proof of the US patent system is a reward for the invention system.

3.3 Research on German Patent Legislation System

Article 142 of the German Patent Law stipulates the content of the criminal constitution. It can be seen from the provisions that the German Patent Law provides for criminal regulation of the infringement of property rights in patent rights, such as manufacturing, sales, promised sales, and use. However, there is no provision for acts such as fictional counterfeiting patents that have the meaning of deceiving the public. From the provisions, we may be able to infer that Germany believes that patent rights are private property rights, and infringement of patent rights is a violation of property rights. However, its

legislative intent and legislative reasons, we still have to explore from the country's legislative history.

Because of the special geographical problems in Europe, the history of Germany's legislation or the history of the entire continent of Europe is united. It is difficult to separate a country alone. Therefore, the legislative history of Germany was also the legislative history of the European continent at the beginning. The burgeoning patent was born in the 10th century BC, a chef in the ancient capital of Sybaris (then a Greek colony), known for its extravagance in life in southern Italy, was awarded the "privilege" of "exclusive" for one year because of its new cooking methods. The medieval feudal royal family was granted a privilege when the king intended to grant a privilege to someone, signing a document and stamping the seal of the king or queen. This is the earliest manifestation of patents. In 1421, the architect of Florence, Italy, Brunelle, obtained a three-year monopoly on the "barge with cranes" invented for the transport of marble. This is the first technical patent with modern features. The Venetian Republic in the Middle Ages was the first country to enact legislation for "patents", which enacted a decree in 1474 stating that "any other person within 10 years, within the territory of the city of the Republic, without the consent of the inventor Or permit, may not manufacture the same or similar items; in violation of the above provisions, the inventor has the right to file a lawsuit in the city government office, the city office will order the infringer to pay 100 Ducato (Venice ancient gold coin name) compensation, and immediately destroyed its imitation."

During the Renaissance, Europe's emphasis on intellectual property continued to increase. Around 1790, the germination of early liberalism was born, which was mainly influenced by the French Revolution and Kant's philosophical thinking. The goal of national public administration is no longer simply public welfare, but the protection and realization of individual rights. At the beginning of the formation of German natural law, the concept of personality rights played an important role in it. Most Kant natural jurists analyzed and elaborated on human rights and other issues in the late 18th century. Every natural person has a corresponding human right since birth because of their original rights. "Is the privilege system allowed? There is no doubt that it is unreasonable. The purpose of the state union is to safeguard our private rights. But the privilege system cancels the original right of equality." And all primitive human rights are included in the human rights based on the establishment of personality. Since the 1890s, these rights have been extremely common in natural law textbooks, and all types of claims have come from personality rights. Personality rights not only have the characteristics of constitutional freedom, but also the unswerving maintenance of the private rights

along with natural birth. At the same time, the concept of natural law property includes not only the property of tangibles, but also the thoughts and achievements of human beings.

The abolition of patents that prevailed throughout the European continent in the 19th century also had an impact on German patent legislation. Opponents of the patent system, such as Prince Smith, argue that "patent authorization is a commercial monopoly imposed by law." Anton von Krauß-Elisago further believes that "in order to encourage invention and creation, the invention protection based on purely state administrative behavior undoubtedly limits the natural right of citizens to invent and counterfeit within a certain scope." And the staunch supporters of the patent system are constantly demonstrating, Rudolf Klostermann proposed that "the purpose of patent legislation is to ensure that the applicable invention establishes exclusive use rights in a certain form, and guarantees the exchange value of the invention and total amount of the inventor in full use." That is, if there is no patent protection, then there is no investor invented, because there is no exclusive right as a prerequisite, and the investment risk will undoubtedly increase. This will bring huge obstacles to technological innovation and the development of the national economy. The protection of inventions through patent monopoly is not a precondition for attaching importance to the patent movement. Patent monopoly is only a way in which inventors can more easily collect compensation from other users.

This was followed by the signing of the international patent treaty and the establishment of the European Patent Office, which showed that the German patent system was gradually internationalized. After that, Germany experienced the world war. After the war, Germany had modified and changed the patent law and patent institutions, but it was essentially the content of the pre-war patent system. With the advent of the information age, the German patent law is constantly being revised to adapt to the changes of the times, but it is still the main tone of the legislative thinking of the German patent law has been laid.

There have been many great philosophers in the history of continental Europe, and the human rights movement on the European continent is the most intense. The protection of private rights is highly valued. The emphasis on personality rights and private rights in German law can be regarded as the top in the world. It is also the emphasis on private rights that also creates provisions in German patent law that are different from those of other countries. Germany puts more emphasis on the private rights trait of patent rights, and considers this to be the private property rights of citizens, while diluting the monopolistic nature and privileged nature of patent rights. This has also led to differences in German

patent infringement regulations.

3.4 Research on Japanese Patent Legislation System

In the Japanese Patent Law, a chapter of penalties (Chapter 11) was established to stipulate penalties for violations of patent rights. Article 196 stipulates the content of the crime of infringement, Article 197 stipulates the content of the crime of fraud, Article 198 stipulates the content of the crime of false identification, Article 199 stipulates the content of the crime of perjury and other crimes, Article 200 stipulates the content of the crime of leaking secrets, Article 200 bis stipulates the content of the crime of violating the secret order, Article 201 stipulates the content of the two fines. In Japanese law, the protection of patent rights is very detailed. It not only defines fraudulent acts such as false marks as crimes, but also defines violations of patent rights and disclosure of secrets as crimes. It can be said that Japan's protection of patent rights is very strict. And why does Japan impose such great protection on patent rights, the answer will be in the development of the patent system in Japan.

Before the Meiji Restoration, Japan was still a closed-door country. At that time, Japan was still in a self-sufficient feudal small-peasant economic era. This kind of socio-economic model, on the one hand, hinders the entry and spread of foreign invention technology, on the other hand, it has caused the country's invention and innovation activities to stagnate. The "New Regulations" promoted by the Tokugawa Shogunate was formulated to consolidate its rule. It clearly prohibits the manufacture and sale of novelty clothing, snacks, toys, books, and utensils.

However, the rise of "Lan Xue" in Japan and the social reforms resulting from the "Meiji Restoration" have gradually broken the situation of shutting down the country. Fukuzawa Yuki, a famous Japanese enlightenment thinker, was the first person to introduce the concept of the patent system into Japan. After studying the West, Fukuzawa said that "Japan's shortcomings compared with foreign countries are academic, trade and law." In his "Western Things" published in 1867, the concept of patents was proposed and described: if a person invents something new, the government should give this person the right to monopolize the benefits brought about by a certain period of time, so as to protect the interests of the inventors and encourage people to invent and create. In 1868, scholar Kanda Hira introduced the European and American patent system from the perspective of industrial policy, emphasizing the need for Japan to implement the patent system. At the call of scholars, the Meiji government of Japan promulgated the "Provisions of Monopoly" on April 7, 1871, with the aim of encouraging people to engage in more inventions and creative activities. It is the first Japanese law related to patents. However, due to the fact that the patent

authorization standard stipulated in the General Regulations was too high and there didn't have suitable environment for the implementation of the patent system in Japan at that time, the "Provisional Rules" was declared abolished less than one year after its implementation. Although General Regulations has been implemented for less than a year, it has important implications, the General Regulations created a precedent for the Japanese patent legal system, and its content broke through the customs and imprisonment under the Japanese shogunate for many years, laying the foundation for Japan's patent system in the future.

After the abolition of the "Specialty of the Monopoly", there is still a voice calling for a patent system in Japan. Thus, in 1879 the Japanese government put the patent system back on the agenda. In 1885, the civil servant Takahashi was a clean-up leader, drafting and enacting the Monopoly Patent Regulations, which was implemented on April 18, 1885. After examining the patent system in Europe and the United States, the Japanese government promulgated the Patent Regulations in December 1888, and also promulgated the Design Regulations and the revised Trademark Regulations. The promulgation and implementation of the "Specialized Patent Regulations" and the "Patent Regulations" have greatly stimulated the enthusiasm of the society for invention and creation and achieved excellent social effects. One year after the promulgation of the Patent Regulations, the "Report on the Implementation Status of Invention Patents" issued by the Japanese Patent Office revealed that 425 patent applications were submitted to the Japanese Patent Office in the year of the promulgation of the Patent Monopoly Regulations. Of these, 99 were granted patents. It laid the foundation for the advancement of modern Japanese technology and the development of technology companies.

In the late Meiji government, Japan's economic strength increased and its influence in the international market gradually increased. Based on the above international environment, Japan joined the Paris Convention in 1899. In order to meet the requirements of joining the Paris Convention, Japan amended the current patent law, and the Japanese Patent Law was born in 1899. But this revision is only to adapt to the Paris Convention.

After that, Japan experienced the baptism of the World War and the patent war with the United States for 10 years. Since 2002, Japan has begun to implement the strategy of strengthening the country with intellectual property rights. At the same time, Japan has also entered the period of strong patent protection.

The impact of the US-Japan 10-year patent war on Japan is enormous and far-reaching. Its cause should be attributed to the recession of the US economy in the

1980s, and at this time, the Japanese economy entered its heyday. Due to the impact from Japanese manufacturing, the US's international trade competitiveness continued to decline, and its share in the international market gradually declined; domestically, emerging markets are also encroaching on a large share of the US market with cheap labor and low prices. As a result, the United States, once the largest creditor country in the world, surpassed its debts at the end of 1984 and became a pure debtor.

In order to reverse this situation, the United States conducted a survey of its own trade situation and found that although the United States is in a deficit state in terms of trade in goods, the trade surplus in technology trade has increased year by year. In fact, the economic development of the United States has mainly relied on the development of science and technology since the Second World War. In particular, the period of arms race between the two sides in the US-Soviet Cold War has greatly stimulated the development of civilian technology. Intangible assets such as copyright, patents, trade secrets, etc. become an important part of American social wealth. In 1992 alone, the foreign sales and exports of US core copyrights were US\$60.18 billion, a figure that has surpassed that of automobiles, agriculture, and aircraft manufacturing, making it the largest single source of exports in the United States. However, because intellectual property rights are intangible, easy to spread, and easy to imitate counterfeiting, the counterfeiting behavior of these high-tech products in other countries has brought huge losses to the United States, and also affected the export of physical goods in the United States, thereby expanding the deficit of US international trade.

Based on the above background, the United States launched a patent war against Japan. In the US-Japan patent war, American companies used a large number of patents held in their hands as weapons, and filed a large number of lawsuits against Japanese companies' infringements. However, due to the lack of experience of Japanese companies and the disadvantages of patents, they often pay a high amount of compensation at a huge price. In this way, the United States obtained a high amount of compensation through the patent war to balance the trade deficit.

Patent Litigation in the US-Japan Patent War		
Time	Claims	Consequence
May, 1983	ECD accuses Panasonic of infringing its "rewritable large-capacity disc" patent	Panasonic is banned from selling disputed products in the US market; and pay \$3 million as compensation; Other related companies signed a patent implementation license contract with ECD and paid a large amount of patent royalties.
1984	Lining v. Sumitomo Electric infringes its patent on optical fiber	Sumitomo pays Lining a settlement of 3.6 billion yen
October, 1984	Alaide Inc. accuses Nippon Steel, Hitachi Metals, and TDK of infringing its patents on the manufacture of amorphous metals	Three Japanese companies pay Adelaide \$28 million in royalties each year
1986	Texas Instruments accused eight companies, including Fujitsu and Toshiba, of violating its patents on semiconductors	Eight companies pay hundreds of millions of dollars in royalties to Texas Instruments each year, and significantly increase patent royalties after 1991.
April, September, 1987	HW Company of the United States accuses Japan's Minolta, Nikon, and Canon of infringing its autofocus patents	Minolta paid \$120 million in settlement to HW, and HW eventually made a profit of more than \$1 billion from autofocus patents
August, 1987	US Jenantco accuses Toyobo of Japan of infringing its drug patents	Toyobo is prohibited from continuing to manufacture and sell new drugs for thrombus solvents
1992	US Fairchild sues Sony, Panasonic, Sharp, Canon, Toshiba, and Nippon Electric for infringing its electronic eye patents	The defendant companies pay 10% of sales as royalties

Of the 50 patent litigations involving Japanese companies accepted by the US International Trade Commission, only one was a Japanese company won the case. More than 80% of other US-Japan patent disputes in private settlements are settled by Japanese companies paying a large amount of settlement fees. Although Japan was already the world's number one patent country at that time In fact, Japanese patents mainly rely on the introduction of foreign patents to develop themselves. These patents are not dominant in the patent war. And Japanese companies were not accustomed to the US International Trade Commission's and US court's litigation procedures, especially the US jury system. This has led Japanese companies to dare not respond actively and can only request reconciliation. At the same time, Japanese companies are strongly dependent on the US market. The United States is Japan's largest overseas market. In order not to lose this big market in the United States, Japanese companies are afraid to compete with American companies, and more are asking for reconciliation.

In this context, Japan began to implement a strong protection policy for intellectual property rights in 2002, proposing a strategy of "developing

intellectual property rights" in order to achieve a domestic economic recovery and an increase in international competitiveness. This also marks the period when Japan implement strong patent protection.

After sorting out the history of the development of the Japanese patent system, it can be found that each inflection point of the Japanese patent system is based on the development of social productivity and uses policies to stimulate economic development. This also confirms the industrial policy theory supported by the famous Japanese patent law scholar Mr. Yoshihiro Yoshito, that is, the patent system is adopted from the national industrial policy considerations. In modern Japan, the protection of intellectual property rights such as patents was intensified, and this behavior was more a product of the ten-year patent war in the United States. In this patent war, Japan invested a lot of money and energy, and learned the experience: They cannot subject to other people in patent. Therefore, some scholars have proposed that the purpose of the US patent right is to give the patentee a reasonable monopoly power, while the Japanese patent right is to avoid conflict and cooperation. In any case, various factors have created the appearance of the Japanese patent system, the strong protection of patents.

Chapter four Analysis on whether the infringement of patent rights should be bound by criminal law

4.1 The theoretical basis of the criminalization of patent infringement

The basis of the patent right is the scientific invention and creation based on the natural sciences. It is the monopoly enforcement right for the purpose of making profits. The TRIPS Agreement writes in its preface that intellectual property rights are private rights. Private rights for the purpose of making profits, that is, property rights, should be protected by the laws of various countries. As the most severe punishment for illegal crimes, criminal law should also regulate the serious violation of patent rights (property rights). The purpose of the criminal law is to protect legitimate rights and interests, and to prevent crimes. If the crimes are not regulated, it will inevitably lead to the destruction of certain legally protected social relations, thus affecting social stability. The granting of patent rights is subject to the approval and confirmation of the national patent system. The relevant patent law also balances the distribution and commitment of interests between the patentee and other social entities by setting rights and obligations, in this process, the private interests of patent owners and other social subjects can also be realized. At the same time, the realization of rights needs to be

accompanied by the content of obligations, and it is necessary for the subject to do or not to perform certain actions to ensure such realization, and the most powerful backing is the national coercive force. Compared with the general commodity market, the ideological achievements are more dependent on national legal protection because of the lack of powerful self-reliance measures. Only by providing a more developed, complex and sophisticated protection network than ordinary commodities for ideological achievements, can the state continue to attract capital and talents to create and encourage the creative subjects to release their innovative potential in an orderly manner. Therefore, the ideological products as production factors are circulated in the market, and finally the economic form evolves from primitive freedom to highly free form. From the investment curves of product types such as patents, trademarks, and copyrights, it can be seen that the average capital, difficulty and risk of patent technology R&D investment are far greater than the other two categories, presenting a "U-shaped curve". In order to encourage innovation, the state should provide a higher level of protection than other property rights, but in fact, for ordinary property rights, trademark rights, copyright, the state provides security police to maintain order, administrative and criminal liability sanctions for network protection, but for patent rights they don't even provide the same level of protection. This makes the patentee not only bear the risk and cost of research and development, but also bear greater protection costs compared with other property owners. This additional protection cost makes technological innovation behavior a high-risk behavior, which greatly dampens the enthusiasm of market participants for investment innovation and the use of the patent system. Therefore, there are good reasons for criminalizing patent infringement. The modest and severe nature of the penalty determines its protection as a last line of defense for the society and the public interest. On the other hand, the patent right represents the private interest and on the other hand, as an incentive system, criminal protection for it has its legitimacy and rationality.

4.2 The theoretical basis for the decriminalization of patent infringement

Compared with ordinary civil rights, patent rights have special attributes, such as intangibility, maturity, regionality, weak exclusivity and instability. Its particularity is not only manifested in the way of acquisition and exercise, but the uncertainty of the effectiveness and scope of rights is also an important part of patent rights different from traditional property rights. The uncertainty of patent rights has brought difficulties in the determination of patent infringement. Nowadays, although the patent laws of various countries have confirmed that the patent right

is similar to the property attribute of ownership, the criminal law protects the patent right from serious illegal infringement and violation of the order of property rights. However, the theft of tangible property is still quite different from the invisible patent technology. From the possession or ownership of the object, theft of tangible property ownership and patent rights are fundamentally different. In particular, when accused of infringement of patent rights, it often involves a re-examination of the validity of the patent right through administrative procedures and a complex judgment on whether or not the infringement is established on the premise that the patent right is valid, which will inevitably lead to the difficulty on the investigation of criminal responsibility. After the infringement of patent rights is criminalized by the Criminal Law, the premise of the criminal liability of the actor must require subjective intent, After the infringement of patent rights is criminalized by the criminal law, the premise of the criminal liability of the perpetrator must inevitably require subjective intent. In contrast, the subjective aspect of the perpetrator of the crime of copyright infringement and the crime of counterfeiting trademark is easier to judge, while whether the actor in patent infringement has such subjective fault will be seriously affected by factors such as the validity of the patent and the publicity of the patent. Moreover, once criminal proceedings are initiated, the original order of production and management is often severely damaged by the direct liability of the person subject to criminal coercive measures. If the final determination of the infringement is not established, the economic losses caused to the defendant will not be remedied. At the same time, it is not conducive to the realization of the purpose of the patent system to criminalize the infringement of patent rights. On the one hand, the realization of all the patent systems to promote scientific and technological progress and the improvement of public welfare goals depends fundamentally on the implementation of patented technology solutions. When technology develops into a product that contains hundreds of thousands of patented technologies, improper use of penalties will hinder commercial development, which will have a serious negative impact on the implementation and realization of patented technology, and ultimately affect the original intention of the design of the patent system. On the other hand, criminalizing the infringement of patent rights may also affect the positive significance of patent infringement civil litigation activities on the operation of the patent system, thereby undermining the complete structure of the patent system and fundamentally damaging the public Interest. The initiation and operation of patent infringement civil litigation has the necessary corrective and complementary effects on improper patent authorization caused by natural defects in the censorship system. In this sense,

the patent infringement civil procedure is an important part of the patent authorization system along with the patent examination system and the patent invalidation procedure. By correcting the improper authorization afterwards, it is possible to eliminate the impediment to the legitimate competition order and the innovation order by the patentee's improper monopoly in time, and thus approach the better state of the patent system. The criminalization of patent infringements will make competitors or others choose to avoid challenging patents that are suspected in terms of scope and effectiveness through actual implementation. Thus, although the infringement of these patent rights will be greatly reduced, the infringement civil litigation activities against these patent rights will not occur, which seems to prevent patent infringement more effectively. At the same time, however, the opportunity for re-examination of the validity of these patents has also been greatly reduced. Some improper authorizations will not be corrected, and the public will have to tolerate monopolies that should not be tolerated.

All in all, patent crimes are related to the operation of the patent system and the protection of patent rights. Therefore, the determination of patent crimes is only limited by the need of the special social relationship protection involved in the patent system. For social relationships that can be protected through universally motivated crime, there is no need to repeat the patent law unless it is based on special policy considerations. At the same time, although legislation and doctrine have recognized that patent rights are private rights, there are still many differences between patent rights and traditional property rights and other intellectual property rights. Therefore, whether the patent infringement should be criminalized in the patent law or criminal law needs to focus on these differences in patent rights. Infringement of patent rights is not the same as infringement of other intellectual property rights. It does not play a role in deceiving the public; criminal law is not a necessary condition for promoting the advancement of patent technology, and does not contribute to the vigorous development and quality progress of invention activities. The criminalization of patent infringement is not the only option for countries around the world.

4.3 The Enlightenment of Different Patent Legislation System to China

Taiwan Province of China believes that the use of criminal measures to protect patent rights is not only not conducive to the rapid development of technological inventions, but will also increase costs (judicial police, procuratorate filing and other resources). The United Kingdom regards patent rights as a privileged system, giving the patentee exclusive rights for a certain period of time. The United States regards the patent system as an incentive policy, which is the driving force behind

business development and economic growth. Germany emphasizes the private rights of patent rights, and considers patent rights as part of the personality right and private property rights. In the early days, Japan also successfully transformed itself with the patent system and got rid of the social model of the small-scale peasant economy. However, after the patent war between Japan and the United States, the patent protection was strengthened. This policy is more due to international pressure. At this time, Japan's patent system is no longer a protection system for policies or private rights, but a means of internationalization and a stress response to enter the national market.

The Taiwan region of China recognizes that the violation of patent rights should follow the principle of freedom of contract and protect and maintain it from the civil aspect. The United Kingdom and the United States criminalize the infringement of patent rights that deceive the public, others use civil norms. The author believes that the above three countries and regions, when they identifying the nature of the patent system, they tend to classify it into a commercial method or a commercial means. The purpose of infringement of patent rights by patent infringers can be understood as they want to learn from others the way to make money. They do not have the intention to take patents as their own. If learning this method of making money have to pay a lot of money, will be enough to discourage the person who wants to infringe. At the same time, we must also consider the excessive protection of patents, which may have a restrictive effect on technological innovation. After all, technological innovation is mostly the improvement of the products of the predecessors, and the progress is not one-step, but is generated step by step. It is competition that promotes the development of society.

Germany belongs to the European continent, and its geographical location determines its cultural origins. The famous "the wind can enter, the rain can enter, the king cannot enter", this best explanation of the theory of private rights, is the story of the German emperor William I in the eighteenth century. During the French Revolution and the Renaissance, a large number of philosophers appeared, and many new theories emerged. Among them, the admiration of human rights, including the show more importance to personality rights, had a great impact on the legislation of the European continent. Germany is a civil law country with a legislative thinking that values private rights. This idea is reflected in the patent system. The infringement of patent rights is classified as a violation of private property rights, without a factor that needs to be accounted for by the public. This kind of protection of private rights will indeed bring the inventor a sense of security, so that inventors can safely develop technology and have no worries

about technology disclosure, and it is also a way to greatly promote scientific and technological progress.

As an island country, Japan's political system is mostly learned from the world powers. During the Tang Dynasty, Japan studied Chinese culture, and the period of small-agricultural economy was also rich in domestic. However, Japan does not have the geographical advantage like China. China has a vast territory and abundant products. Even if the times change, the closed-door country can maintain its operations. But Japan can't move for the times. Japan is surrounded by the sea, an island country has no innate resources to consume. Therefore, under the wave of the times, Japan implemented the Meiji Restoration and vigorously promoted the patent system with a view to stimulating the innovation and development of social technology. And Japan's industrialization has also achieved fruitful results, and Japan has indeed embarked on the path of the world's frontiers. However, the ten-year patent war between the United States and Japan has sounded the alarm of Japanese patent protection. Japan has carried out a very strict revision of its domestic patent protection system, and has raised the protection of patents to the strongest state. The author believes that Japan's patent system development model is more affected by the international, and this may be part of Japanese culture. The strength of the strong is my strength, and the strong learning ability is also a way of success.

Therefore, when treating the patent system in different countries and regions, some regard the patent system as a business method and manage it in a commercial manner; some regard the patent system as a national policy, as the driving force for stimulating economic development and promoting scientific and technological progress; some regard patent rights as private property rights and no one can infringe upon them; Some have changed their policies according to the international situation and are more responsive to international development trends. The patent protection system of any country is a valuable experience and a model that can be learned in the development of the patent legal system.

4.4 Proposal for Patent Criminal Protection System

After linking the cultures of various countries with the concept of patent legislation and the formulation of the patent system, we found that each country has different provisions on the criminal protection of patent rights, but each rule is formulated with its own unique reasons. It is true that the protection of patent rights by criminal means has its positive and negative effects. Criminal regulation of patent infringement is an affirmation of the patentee's own rights, at least in form, and is the perfection of the legal system; but the patent right is still expanding, with specific intellectual property as the object. There are indeed

standards for infringement of patent rights, but this standard is very difficult to define.

Patent rights and patent systems should not be considered only as a business method, but overemphasizing the private attributes of patent rights, while ignoring the impact of the patent system on national economic innovation and national economic development is also inappropriate. The patent system of the United States and the United States has caused large companies to enter a state of competition. Major companies are researching and developing new technologies in order to obtain good chips in the patent competition. Patent technology can not only be used as a bargaining chip for patent competition. The significance of setting up a patent system is not it. But if it can achieve the role of promoting the rapid development of the entire industry, it is also a positive significance for the establishment of the patent system.

Chapter five Conclusion

As a driving force for social development and world economic growth, the patent system has the profound significance of encouraging invention and creation and inspiring scientific and technological progress. However, we must also recognize that the patent right is actually a very special right. It is different from the previous tangible property and has its own characteristics, such as instability and duration. It may not be enough to protect it only by applying traditional protection patterns for tangible property. While reviewing the content of judicial practice and the academic attitude towards the infringement of patent rights, the author focuses on the analysis of patent systems in some regions and foreign countries. The author believes that penalties for infringement of patent rights may not be subject to criminal penalties. Instead, they can be dealt with by high compensation or temporary injunctions, permanent injunctions, and the introduction of patent insurance concepts. This paper is based on reading a large number of legal articles and the writings of relevant scholars in related fields, plus the author's own ideas and viewpoints, and finally formed this article, hoping to benefit the legislative provisions on patent infringement in the patent system.

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