

Research on the Necessity of Punitive Damages Stipulated in Patent Law

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Keywords: Patent Law; Punitive Damages; Legal Provisions; Patent Infringement; Safeguard Rights

Abstract: Under the background of building an intellectual property power, the number of patent applications and authorizations in China has shown explosive growth. At the same time, the number of patent-related civil disputes is also rising rapidly year by year. However, from the actual situation, problems such as difficult to prove evidence, high cost of safeguarding rights and low compensation amount have become a common phenomenon in judicial practice in the field of patent infringement in China. The compensation principle in the traditional civil law cannot solve these difficulties effectively. To address this challenge, Article 71 of the Fourth Amendment to the Patent Law, which came into effect on June 1, 2021, formally established China's system of punitive damages for patent infringement. Before the State Intellectual Property Office issued the revised draft, through visits and field investigations, it was found that the key to stopping patent infringement and protecting patent rights is to increase the amount of compensation, so the introduction of punitive damages is particularly important. However, there is still a dispute about whether punitive damages can be applied in the civil field.

1. Introduction

Punitive damages refers to the amount of additional damages that the court determines the defendant to be liable for in addition to the actual loss, and applies to the plaintiff's injury as a result of the defendant's malicious, intentional, fraudulent or conniving conduct. The main purpose of punitive damages is to deter infringers or potential infringers and encourage rights holders to actively defend their rights by imposing penalties beyond the actual loss, increasing the cost of infringers, while increasing the benefits of remedies for rights holders, so as to meet their needs to protect the intellectual achievements created through the creation of spiritual products [1-3]. The measure aims to strengthen strategies to combat IP infringement and promote IP protection in a period of social transformation. In some overseas countries or regions, punitive damages imposed by courts on infringers are usually only applicable in cases of intentional and serious infringement of intellectual property rights [4]. In determining the amount of punitive damages, the principle of the plaintiff's request and the principle of proportionality should be followed [5].

In the modern economic society, with the advancement of reform and opening up, various types and levels of media continue to emerge, and the number is increasing rapidly. In addition to the traditional paper media, thanks to the development of modern Internet technology and science and

technology, the emerging network multimedia emerged at the historic moment, and its transmission speed is faster, the coverage is wider, and the influence is stronger [6]. This has greatly promoted the dissemination and circulation of news information, personal information, scientific and technological information and other types of information, and people's ways of obtaining information have become more diversified and convenient. The intellectual achievement of the object of patent right is a kind of knowledge product with information as the core feature, which has intangibility, dissemination and sharing. In order to obtain legal protection for the exclusive use of patented technical information, it is necessary to go through the procedure of disclosing part of the patented technical information to the public before obtaining legal authorization [7]. However, there is a contradiction between the information of the object of patent right and the information disclosure required by legal authorization, coupled with the convenience and diversity of obtaining information, the patent technical information is easy to be known by the public, which leads to the increased risk of patent right infringement [8].

The patent infringement compensation system takes the compensatory principle as the theoretical foundation, and the compensatory principle requires that the actual loss of the victim should be filled as the judgment standard to determine the civil compensation liability, that is, the damage liability arising from the infringement should be limited to the actual damage. In practice, in the process of applying this damage compensation system to investigate infringers' infringement and protect patent rights, it is found that there are some inherent drawbacks, which are mainly reflected in the aspects of patent protection cost being higher than relief income, infringement cost being lower than infringement income, etc. "In practice, the phenomenon of winning lawsuits and losing money is everywhere" [9]. These aspects restrict the right holders to seek legal relief and curb the enthusiasm of the right holders to protect their rights. Therefore, in this draft for comments, the above legal provisions on punitive damages have been added, taking into account the specific situation of protecting the actual patent infringement, the interests of the patentee, the policy considerations of intellectual property strategy and the beneficial experience of foreign countries on punitive damages.

2. Discussion on whether the Patent law should provide for punitive damages

2.1 Positive conclusion

Nowadays, more and more scholars in the academic circle hold a positive view that patent infringement occurs frequently in reality, and the compensatory compensation system alone is not enough to stop the infringement or curb the potential infringement, and the inherent characteristics of the right structure and right realization of patent rights determine that the compensatory compensation system alone cannot achieve the purpose of protecting patent rights [10]. Starting from the function and successful practice of punitive damages, it is necessary to stipulate punitive damages in patent law.

First, the reality factor. With the rapid development of Internet technology and logistics industry, the manufacturing and diffusion speed of patent infringement products continues to increase, which makes the concealment of patent infringement more and more difficult, the benefit of rights protection is lower than the cost of rights protection, and the phenomenon of patent infringement such as intentional infringement, repeated infringement, group infringement and cross-regional chain infringement more and more frequent.

Second, intellectual property rights, including patent rights, are inherently deficient in self-protection. First, "Intellectual property rights can be shared by multiple subjects without exclusivity, and intellectual property rights cannot protect themselves by occupying the object"; Secondly, "the contradiction between the information of the object of intellectual property rights

and the information publicity authorized by law makes it extremely vulnerable to infringement, and the protection of its rights can only be protected through mandatory provisions of the law, and the legal provisions should stipulate more severe responsibilities than other infringements, so as to provide adequate protection for intellectual property rights."

Third, the successful practice of punitive damages. From the current legislation on punitive damages, on the one hand, punitive damages encourage the right holders to protect their rights, play the role of private law enforcement to make up for the deficiency of government law enforcement, and effectively correct the government failure; On the other hand, it has also imposed sanctions and curbed fraud in related fields, purified market transactions, and played a positive role. Therefore, the patent law is ready to introduce punitive damages from reality, theory and practice.

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2.2 Negativism

In this view, punitive damages are actually punitive measures for civil violations, which are regarded as special civil liabilities in the common law system as civil sanctions or private fines, while in the civil law system, punitive damages are more regarded as public law liabilities. As the normative sum of property and personal relations between equal subjects, the main task and function of private law is to adjust and resolve the interest disputes and disputes between civil subjects, compensate the victims who suffer damage due to tort, and the compensation is limited to filling the loss. In order to avoid moral hazard, anyone is forbidden to obtain benefits due to damage [11]. The responsibility of public law is mainly realized by criminal law, administrative law and other legal norms. Punishing and sanctioning illegal acts is the function of public law, and compensating and relieving victims is the function of private law. Liability under private law is fully compensatory and not punitive in any way. The logical basis of this clear division of public and private law liability is that the boundary between public and private law is clear and self-evident, and the way of realizing public and private law liability is also distinct, private law corresponds to compensation, public law corresponds to punishment. Therefore, punitive damages, as a form of legal liability to punish and sanction infringer, confuses the boundaries of public and private law [12]. It is unacceptable to include punitive factors in civil liability, and there is no possibility to apply punitive damages in the civil field, which is used to adjust the relationship between equal subjects. As a part of civil legislation, patent law also cannot provide for punitive damages.

3. The patent law should introduce punitive damages

The author supports the view that the punitive damages stipulated in patent law are in line with the practical needs of protecting patent rights and are reasonable in theory. It is clearly pointed out in the draft for comments that the addition of punitive damages system for intentional infringement is to solve the problem of too low compensation for patent protection caused by the principle of compensation for a long time. The nature of the principle of compensation and its practical operation can neither make up for all the losses suffered by the patentee nor have an effective deterrent effect on the infringement. Table 1 and Table 2 show Statistics of the amount of compensation claimed by the plaintiff and the amount of compensation claimed by the court's

judgment respectively [13].

Table 1: Statistics of the amount of compensation claimed by the plaintiff

Amount requested:R(ten thousand yuan)	Quantity (pieces)	Proportion
$R \geq 500$	14	14.7
$100 \leq R < 500$	29	30.5
$50 \leq R < 100$	15	15.8
$10 \leq R < 50$	32	33.7
$3 \leq R < 10$	5	5.3
$0 \leq R < 3$	0	0
Total	95	100

Table 2: Statistics of the amount of compensation claimed by the plaintiff

Amount requested:R(ten thousand yuan)	Quantity (pieces)	Proportion
$R \geq 500$	2	2.1
$100 \leq R < 500$	13	13.7
$50 \leq R < 100$	6	6.3
$10 \leq R < 50$	30	31.6
$3 \leq R < 10$	28	29.5
$0 \leq R < 3$	11	11.6
Total	5	5.3

First of all, punitive damages are not completely contrary to the basic theory of civil law. The basic theory of civil law is based on the division of public law and private law. It holds that criminal law and administrative law in public law mainly reflect punitive factors and realize justice by punishing the illegal acts of the parties, while private law is used to adjust the personal and property relations between equal subjects. The equality of the subject determines that the object and method of adjustment should follow the principle of equality. As a basic principle of modern legal civilization, there is no subordination, management or superior/subordinate relationship between equal subjects, so there should never be any punishment of one party to the other party between equal subjects, which determines that the violation of the rights and interests of one party can only be solved through compensation. This is the origin of the principle of civil liability compensation. However, since the theory of public law and private law was put forward in Roman law, there are different understandings on how to identify and strictly distinguish the relationship between public law and private law, including interest theory and legal relation theory. The boundary between public law and private law is only relative, and the functions of the two are not completely different. In addition, tort law and criminal law have the same historical origin, and their functions overlap. It is wrong to ignore the sanctioning function of civil liability.

Second, the practical reasons for setting punitive damages. Patent information has certain timeliness, and its novelty and advanced technical information are the key for enterprises to compete and win in the market. Multiple entities can share patent information, and different entities can use the same patent information to carry out production and commercial activities, thereby crowding out, substituting and competing with each other in related markets. This will compress the market space occupied by the original right holder based on the technical advantages of the product. In addition, as patent information is transformed into patented products, rights holders need to expend great energy and effort to discover and verify whether these patented products are infringing. The cost of discovery of infringement is extremely high, and this high cost of discovery may not be fully supported in a specific case, because the cost of discovery includes the cost of discovered

infringement and the cost of undiscovered infringement [14]. Only the cost of the discovered infringement can be supported in the case. These patent infringement phenomena not only directly lead to the loss of operating profits of the right holder, but also affect the product image and corporate image of the right holder, and increase the cost of rights protection. The high cost of rights protection inhibits the enthusiasm of the right holder to safeguard their own rights and interests, and weakens the original intention of the establishment of patent rights and the authority of the law to some extent (see Figure 1).

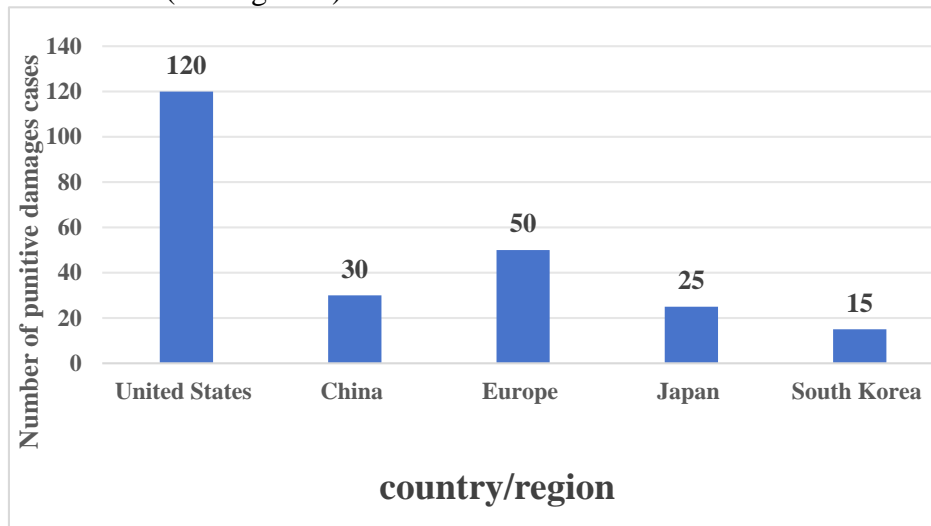


Figure 1: Number of cases of punitive damages by country

Fourth, the conservative nature of judicial operation is also the reason for the provision of punitive damages. It is very difficult to calculate the amount of patent infringement damages due to the particularity of the existence, use and infringement of patent information. In judicial practice, when the rights holder submits various forms of evidence, such as records of the company's profits and income fluctuations, order volumes, shipment quantities, market share, and changes in profit margins to substantiate actual losses, or when they calculate the infringer's profits by multiplying the total number of infringing products sold by the average profit per product. The evidentiary value in establishing actual losses or infringer's profits is significantly undermined due to concerns over the evidence's authenticity, relevance, and legality, especially the ease with which the opposing party can contest its relevance.

Due to the conservative characteristics of judicial operation, judicial practice generally does not recognize the plaintiff's proof of actual loss or income from infringement. In fact, the amount of compensation is most often determined by the court according to various circumstances of infringement through the application of Article 65 of the Patent Law and the discretionary provisions in the judicial interpretation of the Patent Law [15]. This discretionary amount of compensation is also subject to the actual situation of local economies and industries, and the discretionary amount of compensation is generally not a judgment.

Fourth, the provision of punitive damages is a systematic regulation and summary of the legal provisions with punitive nature in the patent law and the judicial interpretation of the patent law. At present, there are scattered provisions of punitive damages in the judicial interpretation of the patent Law in our country. The provisions of punitive damages in the draft amendment of the patent Law are actually the experience and summary of the successful operation of the above provisions in judicial practice. For example, Article 20, paragraph 3, and Article 21 of the Provisions of the Supreme People's Court on the Application of Law in the Trial of Patent Dispute Cases provide that the interests of the general infringer arising from the infringement may be calculated on the basis of

the operating profits of the infringer, and for infringement solely based on infringement, the profits from sales may be calculated on the basis of the sales profits. It can be seen from the judicial trials that the same infringement is treated differently according to whether it is an infringement or not, or the amount of damages is determined by 1 to 3 times of the patent license fee, that the calculation method of the benefits derived from the infringement has completely exceeded the boundary of compensatory compensation, and actually reflects a certain degree of punishment.

Finally, the establishment of punitive damages system can enhance the ability and means of patentee to safeguard its own rights and interests. The object of patent right is the information of intellectual achievement, which has the characteristics of dissemination and sharing. The dissemination of patent information makes technical information spread through various channels, so that the market entities receiving technical information become diversified and extensive. Sharing means that patent information can be perceived, understood and used by multiple market entities at the same time, and when these market entities use the same patent information for production and commercial activities, their product quality and specifications are different from the original right holder, but there is no absolute difference. These two characteristics of patent information are important distinguishing features between patent right and property right. The natural property of the object of real right in the natural space determines that only one right subject can possess, use, benefit and dispose of the object of real right in the same time and space. In addition to the right holder, any third party has no right, nor can it directly bypass the right subject to add a punitive compensation system for intentional infringement, in order to solve the problem of low patent protection compensation caused by the compensation principle of patent infringement for a long time. The nature of the principle of compensation and its practical operation can neither fully compensate the loss suffered by the patentee nor have any deterrent effect on infringement. Take Apple and Samsung as an example, both parties directly manage and control the object of property right through the license, and the intellectual achievement information can be shared by multiple subjects at the same time, which makes the patentee's ability and means to maintain the patent appear weak.

Given the context of the ongoing revisions to the patent legislation and the perspective that supports the inclusion of punitive damages, it becomes evident that there is a compelling need to explicitly establish a punitive damages system within the framework of the patent law. This necessity arises from a multifaceted analysis that takes into account the deterrent effect punitive damages can have on potential infringers, the recognition of the significant harm that can be caused by willful patent infringement, and the importance of providing a robust mechanism for compensating patent holders for the losses they incur due to such infringements. The establishment of punitive damages in the patent law would serve not only as a means to punish and deter wrongdoers but also as a way to uphold the integrity of the patent system and ensure that inventors are adequately rewarded for their creativity and innovation. Therefore, it is imperative that the patent law be updated to include provisions for punitive damages, thereby offering a more comprehensive and effective approach to addressing the issue of patent infringement.

4. Conclusion

The introduction of punitive damages is not only an important supplement to the existing patent protection system, but also an effective means to deal with the increasingly serious patent infringement. With the rapid increase in the number of patent applications and grants in China, the frequent occurrence of patent disputes makes the existing compensation mechanism not effective enough to deter infringers.

Through the implementation of punitive damages, the cost of infringement can be increased, so

as to strengthen the protection of patent rights, encourage innovation and technological progress, and effectively maintain the legitimacy and justice of intellectual property rights. Although there are disputes about its applicability in the academic circle, through reasonable legislative design and judicial practice, the punitive damages system can provide more solid legal protection for China's intellectual property protection, and is an important measure to build an intellectual property power. Therefore, the further improvement of the punitive damages system in the patent law is of great practical significance to enhance the level of patent protection and promote economic development.

References

- [1] Tang Y. Extraterritorial experience with intellectual property punitive damages[J]. *Open Journal of Social Sciences*, 2022, 10(12): 360-375.
- [2] Xu W. Introduction and Implementation Study of Punitive Damages in Intellectual Property Law[C]//2017 International Conference on Innovations in Economic Management and Social Science (IEMSS 2017). Atlantis Press, 2017: 311-315.
- [3] Opderbeck D W. Patent damages reform and the shape of patent law[J]. *BUL Rev.*, 2009, 89: 127.
- [4] Lemley M A. The myth of the patent troll: An empirical study of patent litigation[J]. *Stanford Technology Law Review*, 2004, 2004(2): 1-25.
- [5] Kesan J P, Ball S J. The role of punitive damages in patent law[J]. *Journal of Intellectual Property Law*, 2008, 15(1): 63-106.
- [6] Schwartz D M. Punitive damages and the architecture of patent law[J]. *Harvard Journal of Law & Technology*, 2010, 23(2): 367-450.
- [7] Bessen J, Meurer M J. *Patent Failure: How Judges, Bureaucrats, and Lawyers Put Innovators at Risk*[M]. Princeton University Press, 2008.
- [8] Chien C V. From Arms Race to Marketplace: The Impact of Patent Litigation on Innovation[J]. *Yale Law Journal*, 2010, 120(7): 2066-2115.
- [9] Hovenkamp H, Janis M, Lemley M A. Patent Remedies for Complex Products[J]. *Stanford Law Review*, 2016, 67(2): 235-306.
- [10] Sapatnekar A M. Doctrine of Willful Patent Infringement: Evolution Under American Patent Law And Need of Further Research[J]. *Journal of Intellectual Property Rights*, 2015, 20(3).
- [11] Ginsburg J C, Wright J D. The Appropriate Standard for Awarding Punitive Damages in Patent Cases[J]. *Berkeley Technology Law Journal*, 2011, 26(1): 141-176.
- [12] Merges R P. A New Look at the New Equivalence Doctrine[J]. *Law and Contemporary Problems*, 1999, 62(4): 75-93.
- [13] Allison J R, Tiller E H. The Role of Punitive Damages in Patent Law: A New Approach[J]. *Stanford Technology Law Review*, 2009, 2009(2): 1-32.
- [14] Zipursky B C. Palsgraf, Punitive Damages, and Preemption[J]. *Harvard Law Review*, 2012, 125(7): 1757-1797.
- [15] Lemley M A. Patent Law and the Public Domain[J]. *The Yale Law Journal*, 2011, 121(6): 1584-1618.