

# *Value Confirmation and Protection of Technical Secrets*

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**Abstract:** In the era of science and technology, the technical secrets of enterprises are playing an increasingly important role, but infringements of technical secrets also occur from time to time. This paper mainly starts from the definition of technical secrets, discusses the value determination of technical secrets and the legal protection of technical secrets in civil, administrative and criminal fields. In general, China's protection of technical secrets has been increasing, but there are still problems such as low infringement costs and high rights protection costs that need to be solved urgently.

## **1. Technical secrets of trade secrets**

The technical secrets referred to in this article are the technical information known to the public, with commercial value, and the right holder has taken corresponding confidentiality measures. Generally speaking, the concept of technical secrets will be linked with business secrets, which together constitute commercial secrets. Secrets are an extremely important part of trade secrets. With the continuous development of science and technology, the importance of technical secrets to trade secrets and even the entire intellectual property system is self-evident.

Among the above three elements, the meaning of secrecy is "not known to the public", and some scholars call it "not known to the public". As for the proof of the confidentiality requirements of technical secrets, it is generally believed that as long as the relevant technical information is not generally known by the industry personnel in the relevant field or can be easily obtained by the personnel engaged in the field. In judicial practice, relevant professionals are generally required to conduct corresponding technical appraisals to determine whether the relevant technical information is known to the public and whether the technical information can be obtained from public channels.

The "confidentiality" certification of technical secrets is usually relatively clear, and the infringed party usually needs to produce relevant evidence to prove that it has taken certain protective measures for the technical information, which objectively has a certain protective effect. For example, signed a corresponding confidentiality agreement with employees or stipulated relevant confidentiality disciplines.

The determination of the "value" of another constituent element is usually more complicated, and the determination of whether the technical information has commercial value is often relatively simple, but the quantitative judgment of it is based on the "Supreme People's Court on Trial of Commercial Infringement" Provisions on Several Issues Concerning the Application of Law in Secret Civil Cases, Paragraph 2 of Article 19, the quantitative determination of value usually needs to be combined with the benefits of trade secrets, the available benefits, the time for maintaining a

competitive advantage, and the cost of research and development. Consider. Since technical secrets belong to an emerging field, there is no systematic method for evaluating the elements of value.

To sum up, the core points of whether a technical secret can be constituted lies in the determination of the confidentiality, confidentiality and value of technical information, and the former two can usually be proved relatively directly through relevant technical appraisal and evidence. For the determination of the value of technical information, it is often inferred that it has a certain commercial value through the proof of its secrecy, but the quantification of its value needs to be discussed.

## **2. Value confirmation of technical secrets**

### **2.1 "Quantification" of the value of technical secrets**

In judicial practice, both parties in most cases have no evidence to prove the loss of the right holder and the profit of the infringer. Therefore, in most cases, statutory compensation is adopted to compensate the infringer. Although these cases involving trade technical secrets do not directly regard the commercial value of the technical secrets as the amount of compensation for losses, whether it is statutory compensation, discretionary compensation or punitive damages, the court will take the technical secrets into account when determining the amount of compensation. The commercial value, technology development cost, etc. are used as a reference basis, so it is of great significance for the value determination of technical secrets.

The commercial value of technical secrets includes two parts, "actual" and "potential", that is, when considering the commercial value of technical secrets, it includes but is not limited to the benefits already obtained from the technical information, as well as the benefits that may be brought in the future.

### **2.2 Factors affecting the commercial value of technical secrets**

According to the relevant specific interpretation of the Supreme People's Court, the commercial value of a technical secret mainly considers the commercial value, and should consider factors such as the cost of research and development, the benefits of implementing the trade secret, the available benefits, and the time for maintaining a competitive advantage.

Research and development costs are an important part of determining commercial value. In a trade secret infringement case heard by the People's Court of Bao'an District, Shenzhen City, Guangdong Province in 2018, the court required the appraisal agency to issue a specific explanation for the appraisal value of commercial technical secrets. The agency Shenzhen Zhonghengxin Asset Evaluation Co., Ltd. replied: "This evaluation is a statistical calculation of the cost of research and development investment. " It can be seen that the statistics and confirmation of research and development costs directly determine the value of trade secrets. The amount of loss also has a certain reference significance. The method of expressing the commercial value of technical secrets by their research and development costs is also called the cost method. Although there are limitations to the method of directly using development cost as commercial value, research and development cost, as the most basic factor of commercial value, can most objectively reflect the commercial value of technical secrets. rationality.

In addition to replacing the commercial value of technical secrets with the cost of research and development, there are also market methods, income methods and other methods to consider the factors affecting the commercial value of technical secrets. The commercial value of a know-how also needs to take into account the benefits of implementing the know-how, the benefits that can be obtained, and the time for which competition can be maintained.

For the cost of research and development and the benefits of implementing technical secrets, some scholars call it historical value. To take these historical value factors into account, a market approach is required. That is to quantify the commercial value of the technical secret with reference to historical data, such as the last license fee and transaction price of the technical secret. These historical data reflect the market value of the technology secret. However, if the technical secret does not have historical data such as license fees and transaction prices, its market value cannot be measured.

Benefits and the time to maintain a competitive advantage are called future value patterns. If you want to evaluate the total future gain of a know-how, it is necessary to consider the factors of the future value form. Its core lies in the need to judge the contribution of technical secrets to the entire product or the controlled profit. However, the analysis of future total revenue should still be based on historical data. In judicial practice, the calculation of the amount of compensation for infringement of technical secrets will also be based on the reduction of the number of products multiplied by its gross profit. However, there is not much consideration for this factor..

### **3. The status quo and dilemma of legal protection of technical secrets in China**

#### **3.1 Status of protection**

General, after China's accession to the WTO, the protection of technical secrets has been increasing, but a complete protection system has not yet been formed. First of all, enterprises themselves lack the awareness of protecting technical secrets. Some enterprises not only fail to collect the research and development costs of the enterprise, but also fail to take proper confidentiality measures. Internal information leakage occurs from time to time. Secondly, the legislation of commercial technical secrets also shows a relatively scattered phenomenon, and there is also a lack of uniformity in the determination of cases such as the loss of the right holder in judicial practice. On the one hand, the amount of compensation in cases involving the protection of technical secrets is generally low. On the other hand, due to the complexity of considering the value of technical secrets, the cost of rights protection is generally high.

#### **3.2 Civil protection for technical secrets**

Civil protection for technical secrets is mainly based on the Anti-Unfair Competition Law. In April 2019, only one and a half years later, China revised the Anti-Unfair Competition Law again.

The compensation amount for technical secret infringement cases is generally calculated in the following ways: according to the loss of the right holder, the profit of the infringer, a reasonable multiple of the license fee, punitive damages, statutory damages, discretionary damages and technical secrets business value. If the technical secret has not lost its confidentiality, the first six calculation methods are applicable; if the infringer has caused the technical secret involved in the case to be known to the public, the compensation amount needs to be calculated according to the commercial value of the technical secret.

The newly revised Anti-Unfair Competition Law not only expands the subject of infringement, but also increases the amount of infringement compensation and punitive damages. Taking Guangzhou Tianci High-tech Materials Co., Ltd. v. Wu Jindan and others as an example, the Supreme People's Court applied 2.5 times the punitive damages to it on the basis of fully considering the infringement intention and the circumstances of the infringement. The "Regulations on the Protection of Technical Secrets in Shenzhen Special Economic Zone" also clearly states that the calculation of the amount of loss of the owner of the technical secret shall be determined by taking into account various objective factors such as the cost of research and development, the

benefits of implementing the technical secret, and the reduction of market share. If it cannot be calculated, the infringer's illegal business volume is used as the loss amount of the technical secret rights holder. Of course, this regulation is only for reference in most regions, but it can be seen that the state is gradually strengthening the civil protection of technical secrets.

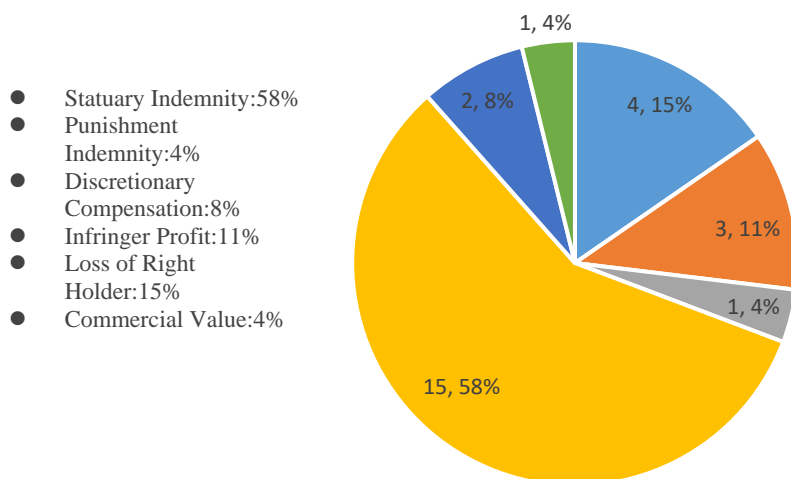


Figure 1 Compensation methods for successful cases of disputes over technical secrets since 2011

80 judgment cases since 2011 were retrieved with the keyword "technical secret", of which 12 were contract disputes. Of the 68 cases related to disputes over infringement of trade secrets, 27 were won. The statistics of compensation methods for winning cases are shown in the figure above. In addition, during the trial of the case, the court mainly determines the amount of statutory compensation based on the following factors: the commercial value of the technical secret, the cost of technical development, the role of the technical secret in the product, the profit margin, the defendant's subjective fault, the scale, scope, and time of the infringement, the plaintiff's claims, etc. The study found that most cases still use statutory compensation as their compensation method during the trial process, which may be due to the fact that some objective factors involved in the case (such as research and development costs, time to maintain a competitive advantage, etc.), the specific amount cannot be determined, and can only be done in the form of statutory compensation. However, with the continuous emergence of high-tech enterprises, the infringement of technical secrets has become more rampant. Strengthening the collection of information on scientific research funds of high-tech enterprises can help those enterprises to make corresponding tax reductions and exemptions on scientific research funds and unify the caliber. At the same time, it can also be used as relevant evidence to help the court determine the amount of compensation when infringement occurs, so as to recover the losses of the enterprise to a certain extent.

### 3.3 Administrative and criminal protection of technical secrets

#### 3.3.1 Administrative protection for technical secrets

Compared with civil protection, the administrative protection of technical secrets needs to rely more on the administrative departments to establish institutional protection and improve guidance. Under the macro background of today's economic transformation, the development of knowledge economy is particularly important. However, many start-up science and technology enterprises lack the awareness of protecting their own technical secrets, which requires the administrative

department to cooperate with the enterprises to take corresponding protection measures, give corresponding guidance, jointly create a good dynamic protection atmosphere, and maintain the normality of the socialist market economy order.

Administrative protection of technical secrets is scattered in the management regulations of various departments, and a relatively complete protection and guidance system has not yet been formed. A high-quality technical secret protection team, meanwhile, strengthens the weak links in technical secret protection, enhances information flow, and guides the imperfections in the technical secret field.<sup>1</sup>

### 3.3.2 Criminal protection of technical secrets

The criminal protection of technical secrets mainly refers to the criminalization standards for trade secrets in the criminal law. From September 14, 2020, the "Interpretation of the Supreme People's Court and the Supreme People's Procuratorate on Several Issues Concerning the Specific Application of Law in Handling Criminal Cases of Intellectual Property Infringement (3)" clearly stipulates that "the amount of loss caused to the right holder of trade secrets or due to infringement If the amount of illegal gains from trade secrets is more than 300,000 yuan, or if it directly leads to the bankruptcy or bankruptcy of the owner of the trade secret due to major business difficulties, or if it causes heavy losses to the owner of the trade secret, the crime of infringing trade secrets has been reached. crime standard".

Similarly, in the "Provisions of the Supreme People's Procuratorate and the Ministry of Public Security on the Standards for Filing and Prosecution of Criminal Cases Under the Jurisdiction of Public Security Organs (2)", the situation of "collapse" has also been added, and at the same time, "the amount of loss caused to the owner of business secrets or due to infringement The threshold for criminalization of "the amount of illegal gains from trade secrets" has been lowered to 300,000 yuan, which reflects the state's strengthening of the protection of trade secrets containing technical secrets.

Compound collegial panel of "criminal + intellectual property" will also be adopted. Take a case of a crime of infringing trade secrets involving network technology in Guangzhou <sup>2</sup>as an example, a new type of Android system cleaning software developed by the victim has certain commercial value. Secretly designed the program of the infringing software, which caused great losses to the victim unit. During the trial, the court combined the criminal and civil commercial secret identification standards, and finally determined the crime amount of nearly 700,000. In fact, civil law and criminal law have different standards for identifying technical secrets. The criminal law threshold needs to be calculated accurately, but for high-tech enterprises, especially network technology enterprises, there are many factors that affect the amount. Part of the amount may not be regarded as the amount of conviction due to evidentiary problems, but it can be counted in civil law. The "criminal + intellectual property" collegial panel criminal can effectively ensure the prudence and modesty of the criminal law, and at the same time provide the right holder with a corresponding civil remedy path.

### 3.4 The dilemma of technical secret protection

First, the protection path for technical secrets and trade secrets is generally not perfect. At present, China has not promulgated a special trade secret protection law. The protection of technical secrets and trade secrets is mainly scattered in the "Anti -Unfair Competition Law ", " Civil

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<sup>1</sup> Mo Haosi : " Legal Protection and Administrative Protection of Proprietary Technology ", " Law Forum " 2005-04-15

<sup>2</sup> See "Huang Moumou and others infringing commercial secrets" , Guangzhou Tianhe District People's Court (2018) Yue 0106 Xing Chu No. 112 Criminal Judgment

Procedure Law " and other laws. The civil, administrative, and criminal protection paths of China also have their own problems.

As far as civil protection is concerned, most of the compensation issues related to technical secret infringement cases should be referred to the "Patent Law of the People's Republic of China ". However, the technical information involved in the Patent Law is substantially different from the technical information contained in trade secrets. In the process of case trial, due to the difficulty of producing evidence and the high cost of rights protection, it is often impossible to fully compensate for the losses of related technology companies, especially start-up technology companies, and it may even aggravate the occurrence of infringements. As far as administrative protection is concerned, although technical secrets are an important part of trade secrets, there are certain difficulties in identifying them. cover. Therefore, in terms of administrative protection, relevant departments should pay more attention to the prior protection of technical secrets, establish and improve the intellectual property protection system, encourage enterprises to innovate, and promote the scientific and technological development of the industry and even the country. At the level of criminal protection, the "criminal + intellectual property" model of "criminal + intellectual property" does help victims to safeguard their rights, but the determination of "significant losses" and the amount of illegal gains under criminal protection is inconsistent with the path of civil law, there are problems of identification difficulties in the judicial practice process.

At the enterprise and individual level, the protection of intellectual property rights has been greatly improved in recent years, but the enterprise itself still lacks the protection awareness of technical secrets. Technology, as the core competitiveness of an enterprise, needs to be highly valued and protected. However, in the actual operation process of the enterprise itself, there is the possibility of unconsciously leaking its own technical secrets or business secrets. Without realizing that this technical secret point will affect the company's major interests, even if a relevant agreement is signed with the enterprise unit, relevant information may still be leaked. For the infringing party, because the relevant intellectual property system is not perfect, the cost of infringement is relatively low, which leads to the occurrence of infringement.

## **4. Construction of technical secrets protection**

### **4.1 Add a confiscation system to increase the cost of infringement**

For small and medium-sized enterprises, the difficulty of proof and the high cost of rights protection are the difficulties in the protection of technical secrets. The new Anti-Unfair Competition Law has introduced the inversion of the burden of proof, which effectively solves the problem of "difficulty in producing evidence". However, the chaos of infringement caused by the low cost of infringement needs to be solved urgently. Referring to the confiscation system introduced by Japan in the field of trade secrets, it has a certain shocking effect on the chaos of infringement while increasing the cost of infringement.

Secondly, enterprises themselves also need to improve their awareness of technical secrets protection. Relevant departments can issue corresponding management opinions and guidelines, and establish a relatively complete prior protection system for the protection of technical secrets of high-tech enterprises. It is determined to provide a valid basis.

### **4.2 Clarify value identification and clarify path protection**

First of all, a commercial value evaluation system for technical secrets should be constructed, and its commercial value standards should be clarified. Since many objective factors affecting the value of technical secrets cannot be accurately considered, the compensation method adopted in



most cases so far is statutory compensation. There should be a relatively uniform "quantitative formula" for the commercial value of technical secrets, taking the profit amount within a certain period as the standard, and appropriately considering various factors such as economic benefits, research and development costs that may be generated for different types of technical information, Discretion is made according to the particularity of the case under a relatively unified system.

At the same time, clarify the protection paths for technical secrets in the civil, administrative and criminal fields. As far as technical secret cases from a single perspective are concerned, there are relatively clear regulations on the determination of the amount of the case. However, from the perspective of the intersection of civil and criminal, because the standards for their identification are not completely unified and need to learn from each other, the legal protection of technical secrets still needs to be clarified, and it is necessary to improve civil judicial remedies on the basis of clarifying legal protection in the criminal field.

All in all, the protection of technical information requires not only post-event legal remedies, but also a sound preventive protection system in advance ; from the subject, not only the princess body needs to increase protection and punishment for technical secrets, but private subjects also need to strengthen their awareness, Promote the healthy development of high-tech industries.

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