Analysis of the Difference between the Liability for Infringement of Artificial Intelligence Products and the Liability for Subsequent Observation Obligations

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Abstract: Currently, artificial intelligence is entering a rapidly developing era. Artificial intelligence technology is growing rapidly. Artificial intelligence technology can already be applied to various fields of social life, and artificial intelligence products with artificial intelligence technology as the core are abundant. Artificial intelligence products have been integrated into the lives of ordinary people. Due to the autonomy of artificial intelligence products, they may work in an unmanned state at certain times, resulting in infringement liability that may cause personal or property damage to others during the operation of artificial intelligence products. There are two ways to pursue accountability: one is to directly pursue the infringement liability of artificial intelligence products, and the specific subject who caused the infringement of artificial intelligence products shall bear the infringement liability; another approach is to pursue the responsibility of the producer and seller of artificial intelligence products for their subsequent observation obligations. The reason is that the producer and seller of artificial intelligence products fail to fulfill their subsequent observation obligations, resulting in the failure to detect defects in the artificial intelligence products in a timely manner and resulting in subsequent observation obligations. The responsible parties are the producers and sellers of artificial intelligence products.

Keywords: Artificial Intelligence Products; Obligation to Observe Products in the Future; Product Infringement Liability

1. Introduction

Artificial intelligence products, no matter how advanced, have a decisive common feature in assessing legal liability. In every case, the functions and decisions of machines can always be directly traced back to the design, programming, and knowledge embedded in them through human hands, or to the human actors who exert control over the machines. These machines, no matter how complex, are ultimately just tools for human use. Artificial intelligence robots are essentially human creations and cannot independently bear criminal responsibility. [1] Taking tools such as cars as an example, when accidents occur and cause personal or property damage, either the user's fault infringement liability can be pursued for failure to fulfill reasonable care obligations, [2] or the producer or seller's product follow-up observation obligation responsibility can be pursued for product defects or failure to fulfill follow-up observation obligations. In today's world, any country that wants to be at the forefront of the world is paying attention to the development of artificial intelligence. So far, many products related to artificial intelligence have emerged, the most typical of which are artificial intelligence assistants, autonomous driving technology, facial recognition... Another example is Microsoft Xiaobing, which can create literary works on its own, and Project Debater, which can debate with people. Although scientists in various fields have been studying artificial intelligence, in reality, the legal application of infringement incidents caused by artificial intelligence has not developed with the development of artificial intelligence, and there are differences in its application. The law has a lag, and the development of artificial intelligence products is gradually beyond the scope of existing legal regulations. In the future, it will inevitably pose challenges to the adaptability of the law. We need to establish a new rule system as soon as possible to adapt to the continuous innovation of artificial intelligence product

technology. [3] In 2017, the "Development Plan for the New Generation of Artificial Intelligence" clearly stipulated that "establishing legal regulations, ethical norms, and policy systems for artificial intelligence" would be the strategic goal for the development of artificial intelligence. [4] Therefore, in this context, it has become particularly important to discuss the ways in which liability for infringement of artificial intelligence products is assumed. Especially when to use the product for fault infringement liability, and when to use the product for subsequent observation obligation liability. It is necessary to distinguish between these two ways of assuming responsibility.

2. Differences in Behavioral Subjects

2.1 The Subject of Liability for Infringement of Artificial Intelligence Products

To constitute infringement liability for artificial intelligence products, there must be a subject of conduct. Otherwise, it will be impossible to identify the person responsible for the infringement, and naturally, it will be impossible to pursue the tort liability of the infringing party. In general tort liability, the actor is usually the person who caused the damage, which can be a quality issue of the product causing damage to consumers, and the producer bears the tort liability. It can also be that consumers using artificial intelligence products cause harm to others, whether it is one person or multiple people. When the actor is a person, it is sufficient to directly pursue the responsibility of that actor. When there are multiple actors, they need to be discussed according to the situation. If multiple actors jointly use a certain product that endangers the personal and property of others and causes damage, if it can be determined that the infringing act was committed by one of multiple actors, the infringing liability of that actor shall be directly pursued; If it is impossible to determine who actually committed the infringement among multiple actors, then multiple actors can only be held accountable at the same time, and these actors bear joint and several liability for infringement, which is joint and several liability to the outside world. The infringee can demand that any one of the multiple actors bear the infringement liability, and the actor who bears the infringement liability can demand that other actors share the infringement liability equally. If the subject of the infringement belongs to a minor or an adult with no or limited capacity for civil conduct, their guardian shall bear the liability for infringement in accordance with the law. Therefore, the subject of liability for infringement of artificial intelligence products may be both producers and consumers. If the cause of harm caused by artificial intelligence products occurs during the sales process, the seller may also be the subject of liability for infringement.

2.2 Behavioral Subjects Who Violate the Obligation of Subsequent Observation of Artificial Intelligence Products

If the actors responsible for infringement of artificial intelligence products include producers, sellers, and consumers, then the actors who violate the subsequent observation obligation of artificial intelligence products are the producers and sellers of artificial intelligence products, and producers can be further divided into finished product producers, component and raw material producers, and quasi producers; Finished product producers refer to producers who independently engage in design, manufacturing, and placing their products in the sales process. [5] As the main responsible person for the subsequent observation obligation of the product, the main reason is that the finished product producer is at the core of the entire product design, manufacturing, inspection and other processes, and is the most important person who can control the quality of the product. The producer of components and raw materials refers to the manufacturer of components or components and the supplier of raw materials. Modern machine mass production means that many products are not manufactured by individual producers alone, and many parts and raw material supplies are involved. If there are defects in the components or raw materials of a product, it usually leads to defects in the product. A quasi producer refers to a person who places themselves in the position of a producer, generally referring to anyone who marks their name, trademark, or other identifying features on a product to indicate that they are the producer of that product.

According to the usual legal principles of product liability, as a quasi-producer is recognized as a producer by appearance, based on the principles of trust interest protection and good faith, Quasi producers should bear the same product responsibility as real producers towards consumers.

3 The Reasons for Their Occurrence are Different

3.1 Reasons for the Emergence of Liability for Infringement of Artificial Intelligence Products

The reason for the infringement liability of artificial intelligence products is generally due to the fact that the user of the product caused damage to others during the use of artificial intelligence products, including damage to public property and damage to private property. For example, if a car with autonomous driving function experiences a car accident while using it, causing injury or death to the driver or others, it will result in infringement liability for artificial intelligence products. If the cause of a car accident is due to problems with the autonomous driving system or the vehicle itself, which are not under the control of the driver, the producer of the car with autonomous driving function should be held liable for infringement against the person who suffered damage as a result. If it is caused by the driver's negligence, overconfidence, or even intentional operation, and it is verified that there are no problems with the autonomous driving car, the driver shall bear the liability for infringement. So, the liability for infringement of artificial intelligence products may be caused by both the producer and the consumer themselves.

3.2 Reasons for the Obligation to Observe Artificial Intelligence Products in the Future

The reason for the obligation of follow-up observation of artificial intelligence products is based on Article 1206 of the Civil Code of the People's Republic of China. If defects are found after the product is put into circulation, producers and sellers should take timely remedial measures such as stopping sales, warning, and recall; If no remedial measures are taken in a timely manner or if the remedial measures are ineffective and cause the damage to expand, the party shall also bear tort liability for the expanded damage. If recall measures are taken in accordance with the provisions of the preceding paragraph, producers and sellers shall bear the necessary expenses incurred by the infringed party as a result. Unlike the general tort liability of artificial intelligence products, the timeline for violating the subsequent observation obligation of artificial intelligence products is between the time when the artificial intelligence products are put into circulation and before causing damage, while the general tort liability of artificial intelligence products only arises after the product causes damage. The obligation to observe artificial intelligence products in the future can fill the gap in responsibility for producers and sellers during the period from the product being put into circulation to the time before causing damage. Therefore, the time period for producers and sellers to bear responsibility for artificial intelligence products expands from the time after causing damage to the time after the product is put into circulation. If they fail to fulfill their obligations and cause certain consequences, they should bear certain responsibilities.

The follow-up observation obligations of artificial intelligence products include the following aspects: first, the fulfillment of tracking observation obligations; second, the fulfillment of after-sales warning obligations; and third, the fulfillment of recalls. Firstly, the obligation to track and observe is fulfilled. After the artificial intelligence product is put into circulation, it does not mean that producers and sellers can ignore the artificial intelligence product put into circulation. Instead, they should continue to track and observe the artificial intelligence product put into circulation to see if it is safe and normal during use. Tracking observation can be divided into positive tracking observation and negative tracking observation. For artificial intelligence products, positive tracking observation can receive feedback by observing the operation of the product, receiving abnormal feedback from the product, or conducting long-term use testing on the artificial intelligence product to ensure its safety. Negative tracking observation can obtain defect information of the artificial intelligence product through consumer feedback, complaints, and other channels, and

timely determine the source of the defect. Secondly, the fulfillment of after-sales warning obligations can be broadly divided into two types. One is to be clear about certain precautions that must be taken before use before leaving the factory, so it is necessary to do a good job of warning consumers about artificial intelligence products before leaving the factory; another type is the discovery of product defects through tracking and observation obligations after artificial intelligence products are put into circulation. If such defects are found, they can be resolved through after-sales warnings, which must be issued in a timely manner. There are no restrictions on the means of issuing after-sales warnings, but the purpose must be to eliminate the risks that defects may bring. If the risks caused by defects cannot be eliminated, it is considered that the after-sales warnings are not timely, That is to say, it violates the subsequent observation obligation of artificial intelligence products. Finally, it is the fulfillment of the recall. The recall of artificial intelligence products is the final step in solving defects in artificial intelligence products. It is a measure taken only when defects cannot be resolved through after-sales warnings or other remedial measures. By recalling defective artificial intelligence products, those that can be repaired will be returned to consumers, while those that cannot be repaired must be disposed of to prevent their secondary circulation into the market. Otherwise, it will still be considered as a violation of the subsequent observation obligation of artificial intelligence products, and corresponding compensation responsibilities should be borne.

4. Different Principles of Attribution

In the current Civil Code's tort liability principles, there are mainly the principles of fault liability, presumption of fault liability, and no fault liability. [6] The principle of attribution is considered the core of civil liability theory and the basis for determining the actor's civil liability. [7] According to the provisions of the Civil Code of the People's Republic of China, the system of attribution principles is constructed from the principles of fault liability, non-fault liability, and fair liability. [8] Among them, the principle of fault is the main body of the system of attribution principles in tort liability law, and the principle

of no fault liability is a supplement to the principle of fault liability. In the absence of clear provisions in the law on the application of the principle of no fault liability, the principle of fault liability should be applied. Therefore, according to the current laws, the liability for infringement of artificial intelligence products should be recognized based on the principle of fault liability. [9] For the subsequent observation obligation of artificial intelligence products, it is the obligation of the producers and sellers of artificial intelligence products to a certain extent. Whether the producers and sellers have conscientiously fulfilled the subsequent observation obligation is unknown to ordinary consumers. Therefore, if the fault principle is applied to the subsequent observation obligation of artificial intelligence products, according to the principle of who claims and who provides evidence, Consumers should assert that the producers and sellers of artificial intelligence products are at fault, which is detrimental to consumers. In addition, the predecessor of the subsequent observation obligation of artificial intelligence products is related to safety precautions, and the principle of fault presumption should be applied to violations of safety precautions. [10] Therefore, it should be claimed by the producers and sellers of artificial intelligence products that they have fulfilled their subsequent observation obligations of artificial intelligence products. If it cannot be proven, it should be considered that the producers and sellers of artificial intelligence products are at fault and bear the adverse consequences.

5. Conclusions

In the trend of the artificial intelligence era, facing the impact and challenges brought by the artificial intelligence revolution to the existing institutional system, change and innovation are the best choices. As the world's largest consumer country, China will also become the world's largest robot market and a huge consumer market for numerous artificial intelligence products. The risks of artificial intelligence products are bound to have an impact on the consumer market and pose challenges to the existing product risk prevention system. Therefore, it is imperative to prevent and control risks in artificial intelligence products. Therefore, it is necessary

to actively reform and innovate the risk prevention system of artificial intelligence products, provide consumers with reasonable and appropriate institutional protection, and provide institutional support for the development of the artificial intelligence industry. In other words, it is necessary to actively exert subjective initiative, while enjoying the technological dividends brought by artificial intelligence, to respond to the risks and challenges that artificial intelligence products may bring, that is, to implement reasonable legal regulations and promote the high-quality development of China's artificial intelligence industry under the sustainable development model that benefits humanity.

At least in terms of the legal application of artificial intelligence products, it is necessary to clarify. Therefore, it is necessary to fully activate the application of the legal system for the subsequent observation obligation of artificial intelligence products, strictly distinguish between the subsequent observation obligation of artificial intelligence products and the general infringement liability of artificial intelligence products, and ensure that artificial intelligence products have sufficient legal protection from the time period after they are put into circulation to before causing damage.

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