Original Paper

A Study on Copyright Protection of Mobile Applications in

Small and Micro Computer Enterprises

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Abstract

As more and more small and micro software developers begin to participate in the development process and gradually become the intermediate force of Internet innovation, people are enjoying their life in scientific and technological progress. As a special kind of software, mobile application has the characteristics of lightweight and simple development, which enhances the difficulty of protecting rights and interests of its copyright owners, especially the small and micro software copyright owners. This paper will explore the particularity of its right protection and its solution, and dig out ways to further motivate social innovation.

Keywords

software copyright, mobile application, identification of infringement

Since 2013, due to the characters of lightweight, easy to develop of mobile applications, the mobilephone software market has emerged a large number of small and micro Internet software development enterprises apart from several major Internet giant companies.

1. The Predicament of Protecting Small and Micro Software Copyright Owners

With the climbing number of related litigation, small and micro software copyright owners are often unable to protect their intellectual property rights as powerful as larger computer software companies, which is also gradually exposed in the litigation dispute of modern mobile applications. The reasons of this phenomenon is mainly as follows:

(1) The obstaclesto proofing evidence in judging the infringement of computer software Accordingly, the rule of "substantial the same+the contact+exclusion of reasonable interpretation" insists in the current computer software infringement cases in China. It is easy to copy software and the

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infringing act is usually carried out in a hidden way among them. Because it is difficult to require the plain tiff to provide the defendant's "access" software, the plaintiff merely have to prove that the defendant "had the possibility of contact". The above regulations have lightened the burden of proof for the copyright owners in the process of proving. However, the critical requirement of "substantial equivalence" is always the obstacle for the copyright owners to prove their rights and interests to have been infringed. In China's courts at present, it use four major methods to compare and make judgement, that is software source program comparison, software objective program contrast, software characteristic defect contrast and software storage media content, installation process, installation directory, "the difficulty of acquiring its evidence decreases in turn the same as the proof effect". Giant computer software companies are often able to block courts to adopt the most reliable software source program to compare by the way of encrypting or highly complicating source code on the grounds of protection of trade secrets. Comparison judgment method, which includes software feature defect comparison and software storage media content, installation process, installation directory, comparison of operating conditions can be totally changed before large computer software companies.

(2) Blurring of protection boundaries resulting from the special relationships between thoughts and expression of mobile applications

In the *Copyright Law*, the protection of copyright has always been limited to the dilemma in which there is merely protection of the way of expressingideas, instead of on the thought itself. Compared with traditional computer software, mobile applications own simpler programming language and their function can become more unitary due to the developing of software market. In other words, in the era of mobile application, good thoughts are becoming the firstdriving force of value creation with simpler expressions. For example, what the trend of China's domestic shared economy and cashless phenomenon need to breakthrough is not simply some shackles of technology, but the innovation of ideas that should be targeted. However, the strict distinction between ideas and expressions often leads to the results that small and micro software copyright owners with fabulous ideas are forced to change their developing patterns under the technological pressure released by large companies. In the face of their intense degree of promotion in the market, the original program can only be buried. Based on the four reasons above, the small and micro software copyright owners can not properly protect their own interests when confronted with the software copyright infringement disputes caused by the giant. It finally causes a series of disputes not to be properly resolved.

2. Countermeasures and Recommendations

After the above analysis, the copyright owners of small and micro software are inevitably in a weak position in the process of dealing with infringement caseson account of many reasons. The following two measures should be considered to further assist small and micro program developers and copyright owners to protect their rights and interests:

(I) Reasonable proportion of the duty on proof for copyright infringement

The fundamental judgment of copyright infringement of computer software lies in the establishment of substantial similarity. However, in the current trial process, the main difficulty in obtaining evidence is how to implement the best comparison method, software source program comparison which is often difficult to realize. The present method of software target program comparison, which is widely used by the court, is able to obtain the comparison samples successfully in most cases but on the diversity of the mobile applications grounds the accused company is often able to make adjustments to avoid making similar judgments. Soit is difficult to protect the interests of the plaintiff (the infringed copyright owner).

In view of the fact that the programming of mobile applications are less difficult than traditional ones, it is properly considered that the accused with greater capacity should share part duty on providing evidence in cases where there is a significant disparity in the position of the original defend ant between the two parties. As a result, it promotes a more just judgment.

(II) Redefinition the scope of copyright protection for mobile applications

The fundamental reason of disputes is that, compared with the traditional and single means to realize goals, programmers posses more diverse ways to achieve them in the era of mobile applications. This feature has indirectly led to the proliferation of homogenized applications and the rapid decline of original programs in the face of the change plus marketing strategies of giant Internet companies. In the long run, it could lead to a decline in innovation or the emergence of more and more Big Mac applications.

Therefore, just as the United States swung between "expression, thought and expression" in the last century, in terms of the special changes in substantive situation of the normal objectives, China's law should also consider making adjustments at the right time, whether it should provide further protection and support for more creative owners and then further stimulate social creativity on the basis of expression protection.

(III) Protection layout of intellectual property rights for small and micro software programmer

In the present stage of law and social conditions, faced withthe circumstance that large computer software companies plagiarize and compete with malice, small and micro copyright owners are often under disadvantageous position. This further requires small and micro copyright owners to improve the initial protection layout of intellectual property.

First of all, copyright of pictures and document records should be defended. The copyright can be obtained without application whose core is to ensure the originality of the records and pictures used in the products. In the process of product design, we should strengthen innovation and make records to characterize the document and pictures important weapon of protecting the rights and responding to the lawsuits.

Secondly, the core technology should apply patent positively. Patent protection is a more difficult but useful way to protect the intellectual property rights. It is the most effective measure to protect the core interests of the small micro software owners at the present stage. Therefore, the application for patent

of the core products is the keyto protecting the intellectual property rights.

3. Significance

Premier Li Keqiang has stressed that promoting mass entrepreneurship and innovation is a major reform that fully stimulates the wisdom and creativity of hundreds of millions of people. It is an important way to achieve national prosperity and the affluence of the people. It is necessary to firmly eliminate all kinds of restraints and shackles. Let pioneering innovation become the trend of the times and gather the powerful new momentum of economic and social development. As an important way to start a business for youth in China, computer software innovation as a platform needs people's attention and support.

How to leave a part of the world for new entrepreneurs in the increasingly competitive Internet market which can provide them with protection and support from the law so that they will not beas weak as the ants trampled to death at the feet of the giant elephants of the Internet. That's the author's writing purpose.