# Studying and comparison Intellectual property rights in software protection between Iran and International Laws on the cyber environment

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**Abstract:** Nowadays, intellectual property especially copyright and its protection in national, domestic and international level is one of the proposed subjects that spread of communications by internet and its availability to access online information increases importance of this type of property and its credit. By emerging the computer age new issues has been raised interpreting of copyright law. Therefore the importance of copyright which is the right of copy, distribution in different types should be protected in electronic environments. In this article it is attempted to studying summary of verifying compatibility of protection rights from software in international levels, Europe countries, united states and Iran both in electronic and non-electronic environments so that the current shortage of these rights could be found in Iran.

Keywords: Intellectual property, Software, Copyright, E-commerce.

## 1-Introduction

By emerging the computer age new issues has been raised interpreting of copyright law. In internet by clicking the mouse bottom, computer provides to creating copies from documents, images, music, software that is impossible to recognize from original version. Intellectual property has an important place in ecommerce frame work and there are several factors to affect it: ecommerce more than any other business systems is based on sale the products and its services which are protected by intellectual property and licenses[2]. Intellectual property has a critical role because the assets which are trading in internet have to be supported by security systems and their policies otherwise the danger of misusage of third parties exists. The legal traditional distribution weakens because stating the idea of an author is protected under the copyright not the idea. These limitation in copyright that do not protect the idea causes a lot of problems for creators of new sources such as computer software, even in societies with civil rights, prosecution and controlling the crimes is a hard work or maybe impossible.

# 2-Intellectual Property

Intellectual property is the right and legitimacy rules by which the owner is granted his benefits and activities and presented ideas. Intellectual property rights are the ones which posses economical values and the subject is not material but it is the rights for intellectual property. Some groups literally name the intellectual property rights as immaterial property rights. Intellectual property rights go through the subjects which bear from contemplation and related to mental faculties of human being. Intellectual property diverges in three categories, Industrial property, artistic-literary property (copyright) and commercial property[6].

# **Industrial property**

In this category of intellectual property, different types of inventions are protected. Although, it is not necessary that the invention is provided by a physical product. Industrial property also creates a patent in usage of an idea. As a result, the duration of support is short and nearly 20 years.

# Artistic-literary property (copyright)

Copyright in terminology defines as getting copy or author's right and technically defines as an exclusive right which are granted to owners of literary and scientific assets. These assets could be in various ranges from literary works to multimedia, handcrafts, rug and carpet features and computer software.

# **Commercial property**

## 3-Software

Software is the collection of computer programs, procedures, commands and documents related to them and the information for operation of a computer system which has a specific usage and is recorded in one types of disks. All software have a common similarity; for making and producing a software, it is required do different complex steps that entitled ''software engineering''. Complicity and different works in software not

only needs a special expertness but also gives an original novelty among intellectual property rights. Therefore analysis, design, test and completion are necessary stages in software production process. Definitely performing these stages requires having professionals, capital resources and efficient powerful management so that by recognizing the demand in market and society could guide the stages in design and production of software. Regarding to this process and costs imposed for producing software, it is an indispensable principle to protect the creators of software in all legal discipline of world [3].

# 4- Legal rights for protection of software

The laws for supporting the software creators are varying in each country. For instance, in some countries is under the control of author rights but in other countries it is named as invention. There are three ways for protection of software creators in legal discipline of world:

## 4.1 Copyright Protection

In this case, although there are similarities between artistic-literary and software works but the most distinction is artistic-literary works originate from taste, talent and their point of view but in producing software, knowledge and acquired science count in .

#### 4.2 Patent Protection

There are doubts and diversity of opinions in naming the production of software as an invention. These discrepancies are made because software has more mathematical and command concepts, whereas the most inventions are based on empirical sciences which is not existed in software and the idea cannot be accepted in the frame of invention rights. But it is accepted that if a software satisfies the terms and conditions of invention (usefulness, not ordinary and being new and industry applied), then it should be categorized as an invention and have to be supported in this frame [8].

## 4.3 Creating a dedicated discipline in protection of software rights

As it was mentioned beforehand, existence of doubts and difference of opinions in the matter of behaving or the way of protecting the computer software result in legislators act new discipline included the positive properties of two previous frames. This new discipline combines both industrial property rights and artistic-literary property rights. For instance in United Kingdom this law is explicitly under protection of author rights but in United States, it is under both categories of copyright and industrial property. European Union Committee acted a new law for protecting the computer software and synchronizing copyright laws in government members in May, 1991.

## 5-Different type of international conventions and software protection

The Berne Convention is a non-duration multipurpose agreement between different governments which was established in September 9, 1886 in Berne, Switzerland and is known as "Berne-Union". It has been revised six times since the first time developed and the number of country members was 59 governments in January 1<sup>st</sup> 1970. 2<sup>nd</sup> part of Berne convention enlisted a clear but not complete a list that which works is under the protection of law; it contains any artistic, literary and science works with any method or type. Moreover the works acquired from other works such as translation, summarization, musical settings and other changes in

an artistic or literary work will be protected. 7<sup>th</sup> part of convention states the duration of protection that shall be copyrighted for at least 50 years after the author's death. Mentioned materials in 2<sup>nd</sup> part of convention are wide enough to cover all works in literature, science and art. Therefore attention to computer softwares is included. They are protected internationally as well as domestic works entitled "copyright" under Berne convention.

TRIPS agreement developed as one of the important documents after several discussions in April 15<sup>th</sup>, 1994 in Oregon conference. It is one the comprehensive agreements in relation to intellectual property rights which stands in international level. TRIPS agreement covers all type of intellectual rights such as copyright and its parties (executor rights, sound producers and broadcast organizations), trademarks, geographic marks, industrial designs, patents, designs of integrated circuits and unrevealed information. TRIPS protects software in 2 ways:

#### 5.1 Protection of software by copyright

Protection of computer software as "copyright" was introduced in 10<sup>th</sup> section of TRIPS agreement by which computer programs (source code or subject code) have been protecting as an artistic work under Berne convention. TRIPS privileges software creators having the copyright protection minimum 50 years after first showing or creation time.

## 5.2 Protection of software as patent law

27<sup>th</sup> section of TRIPS agreement widely categorized registrable subjects as an invention. This section states that registration for inventions in technology fields is executable as applied industry for all creations, productions and operations in terms of being new or having a creative work [6].

# 6. Software protection in Iran

After the establishment and activity of software companies for few years in Iran, by complaining the first software argument in Iranian courts in 1993, suddenly the attention of the juries was paid to this circumstance. Number of new questions has been raised about the placement of the software rights whether software are artistic-literary work or an industrial work ,Under protection of which laws it should be supported. The law of artistic-literary work, law of industrial inventions or a new law.

In 90 s by referring to reasons, some attorneys recognized software as an artistic-literary work and known it as "the rights of the writers and artists" acted in 1969, on the other hand another group recognized software as an industrial product that's why they never saw any matter to protect it under the "patent law and trademarks" acted in 1931. After a few studying and practicing years, in 2000, the law of protecting software creators was acted. The 1<sup>st</sup> part of this law states: "publication rights, presentation, execution and the right to making profit (materially and intellectually) from computer software belongs to the software creator and protects both material and intellectual rights.

#### 6.1 Material rights

All economical revenues and material benefits from software belong to creator. The ruler mentions some of the material rights in first section of article 1 and gives all the rights of making profits to software creator. Material rights include reproducing right, distribution rights, public demonstration, acquiring, translation, etc. The creator has the exclusive rights of any material or intellectual utilization from his own work and any sort

of possession that might lead to financial benefits .Material rights could be both, transferable and temporally. In the rights for computer software protection, the period of material right has been set to 30 years after the creation of the product.

# 6.2 Intellectual rights

The creators of the computer software would benefit from other rights and privileges apart from material rights which are related to the characteristics of the creator and his protection. The intellectual right means that the society would always recognize the creator as the inventor of the work and known him by that specific title as he deserves those privileges. Intellectual rights originates from the character of owner and ignites as soon as the work is created, the 4<sup>th</sup> section for protection of computer software creators indicates "the intellectual rights of software are assigning to the creator and is not limited to a particular time or place and it is none-transferable.

# 7. Penal and civil rights for software creators

In an international level of an international synchronized discipline, there is no guarantee for executing of punishment in favour of software creators and most international agreements pass the duty of applying punishments to internal countries' rights but the status in countries which are members in international conventions such as Berne convention is slightly different. Countries act roles as an international authority. If a country be a member of these agreements or international conventions, and one of its literary-artistic works is being abused, and the country which the offense take place be a member of these agreements, then these works will be supported and guaranteed the punishment according the rules of the country which the offense committed. But as there are different views in regards to software rights and these views causes various authority rules and rights, make the issue more complicated. The first column of 5<sup>th</sup> section in Berne convention, it is requested from countries members to treat the rights for countries members of convention as same as the ones which applied for their own country. They also set this condition to the rest of international agreements. Base on 16<sup>th</sup> section on Berne convention, the acts for punishment and compensation of losses which result from abuses of creators' rights are referred to the domestic country of publishment and nothing is stated about the guarantee for execution of punishments in the context of Berne convention.

In contrary of other international agreements, TRIPS studies the punishments for breaches in software creators' rights more precisely. In 61st section it is named that if the offence commitment be intentionally and in scale of business, the execution of punishment has to be done and even discuss about detention and monetary fines proportional to similar crimes. But never discussed minimum or maximum of these punishments and in which categories of exploitation of creator rights they are applicable. This approach seems to be a right treatment as the expectation of different nations, economical status, creators' rights, and other social, cultural and economical matters make it impossible to define united prosecutions. Even world trade organization that aiming the equality in people life standards, customizes its internal rules and policies by different acts and announcements to accommodate itself with low-level countries [5]. So it is a right decision to adjusting the restitutions and punishments according to internal country laws. Although having a look on civil and penal laws of international conventions makes it clear that the laws are nearly similar and even in non-member countries, are more related to mutual agreements and reciprocations. These violations contain illegal usage, reproduce or any redistribution which lead to abuse the intellectual or material rights for creators of works. This rule considers the crimes such as usage of name, title, or hallmark which is allocated for software independently, but it just restates the 17<sup>th</sup> section of copyright law and just added the

term "software". As a result in conditions of committing this crime, there is no difference with the other crimes [1].

In Iran, according to 13<sup>th</sup> section law of computer software copyright (year: 2000), if anybody violate the rights of under protection of this law, not only he has to reimburse the loss but also will be imprisoned from 91 day to 6 months and fining cash between 10000000 and 50000000 REAL. More over it is mentioned that executing the items to be done precisely is a noticeable and critical issue in protecting computer software. It is said that losses of private complainant should be repaid from the properties of criminal. The decree for private criminal doesn't have any problem, but in the case that the criminal is an organization or groups (which occurs abundant in high-level and professional software in an illicit competition), makes it difficult to wield because it is impossible to claim and take the losses from organisation properties.

# 8- Studying and comparison of software protection in electronic age

8.1 Approaches and international laws

In 1996 world organization of intellectual property acted WCT and WPPT pacts which developed the support of copyright in cyber environment and its transitions. WCT and WPPT generally are called 'internet pacts". In 14th section of WPPT that is about executor's rights states "producers of media by wired or wireless devices, can benefit from exclusive rights for usage of public from their works, by which their people in society could use their works in any place and any time", the 8th section of WPPT contains this concept as well. The important point in mentioned section is that the receiver has the ability to choose the subject in this environment which is in contrast to Medias such as television channels or satellite. In the other word the receiver is not . The point percept from above is that reproducing and copy from works under protection of copyrights in electronic environment require the permission of creator/producer. Also in the 11<sup>th</sup> section of WCT and 18<sup>th</sup> section of WPPT make the governs' members to support these rights, provide ways for restitution of misusing the works, and consider technical and effective measures for applying the creator/author rights according to these pacts and Berne convention. Securing networks and guarantee when breaches of author rights occur in cyber environment are the measures of governments' members [4]. According to 12<sup>th</sup> section of WCT and 19<sup>th</sup> section of WPPT governments have to consider effective ways for compensation when an aware person violates the rights which acted in Berne convention by incitement. The responsibility of providing services and internet contents (ISP&ICP) for providers can be inferred from previous notes. However, it is not indicated to studying the amount of responsibility and leave it for internal courts of countries. Besides above notices, the measure of governments includes creating technologies against reproducing works such as coding devices, non-copying devices, using passwords, etc. but governments still couldn't find an international united way.

## 8.2 Available approaches and rights in United States and Europe

As it was stated before, software is protected under copyright and industrial property. The revision of copyright (acted in 1976, USA) has been categorized the computer programs under the title of qualified literary works for copyright. Although hundreds of software has been registered in patent institute and trademarks of United States but registration for media software is still under negotiation and discussion. Being or not being software to known as an invention is identified by court which this claim is acceptable according to 101st section of the law of registering the inventions of United States. United States of America acted WCT and WPPT as a part of DCMA in 1998 which recognizing copy of electronic works as a crime. In 1991, the union of Europe acted a motion for supporting from computer programs and synchronizing the governments' members. Also the patent convention of Europe (EPC) has stated a list of subjects which are register able as the title of inventions. This list has excluded the computer programs and their information. Therefore doesn't protect software as an invention. Parliament of Europe and European Union acted a motion with title '' motion of European Union' in 2001 which executed in 2002 and the items of WCT, WPPT were included [6].

## 8.3 Available approaches and rights in Iran

As copyright hasn't been run and applied formally in our country, the pirates of literary and artistic works are normal and usual. Before acting the ecommerce law (acted in 2003), protection of authors in digital environment was unclear and just has been paid attention to the laws for support of computer software creators but never mentioned the other rights of author in digital environment. The discussed act is the first law in Iran that practices over protection of author's right in electronic environment.

According to 62nd section of this law 'the copy, execution, distribution of the works is exclusively author's right under support by the law of protection of authors, artists and composers' right (1969) and the law of translation, copying the books, magazines and sound's works(1973) and the law of computer software creators (acted 2000) as "Data message". All the works (which are date-message type such as information, software, computer programs, tools, Databases and also protection of intellectual property in electronic business which contains patent, design right, copyright, protection of Database, protection of integrated electronic circuits and protection of business secrets are affected by this section, law for inventions' trademark (acted 1931) and revision for execution of registration of trademarks and inventions(acted 1998) in conditions that these terms be in the law of protection motions of Islamic parliament. The 74<sup>th</sup> section about guarantee indicates "In electronic transitions, every person which violates the copy, execution, distribution of items which are under protection of law for authors, artists, and composers" rights (1969) or the law for translation and distribution of books, magazines and media works(1973) or the law for computer software creators (1379), will be sentenced for 3months to 1 year and have to pay monetary fine for 50000000 REAL. if these crimes are confirmed by the acts of Islamic parliament". If our country accepts the Berne convention and copyright pact, it would be dedicated a specific code to each producers of works; that code is the document for the person or organization. This code applies as a protector For products and criminals who commit reproducing, distribution or illegal copying, will be punished and prosecuted easily based on this law.

## **Conclusion**

With compare of software protection in international Level, especially in Europe and America with Iran, We are concluding that Iran need to have a major gait in this field. The Iran' Law of protection of software producers, approved in 2000 and law of E-commerce, approved in 2003, gait in exhibit suitable manner for protection of "copyright" of software. However, need to have complete and further gains in this discussion. With attention on new need and limitation that observing in operation and speed of IT evolution that software is one of important tools, seem that is necessary to Review, correction and complete of law with goals of provide logical protection of copyright of software. This effort provide suitable base for reception of international Law of "copyright" protection [7].

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