COMPUTER PROGRAMS AND THEIR INTELLECTUAL PROPERTY PROTECTION IN BULGARIA

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***Abstract**: Problems associated with the operation of computer crimes and the legislation become more valid in Bulgaria. As a member of the European Union, there are high requirement for us about combating piracy and counterfeiting. Overcoming those problems will enhance our reputation in the field of information technology. The paper aims to analyze computer programs as an object of copyright in on one hand and the subject of industrial property on the other. It is an assessment of advantages and disadvantages of different methods of protection for purpose of the Act are considered copyright and related rights, The Patent Law and the registration of utility models and 2009/24/EO Directive of the European Parliament and the Council for the legal protection of computer programs from 23 April 2009.*

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1. PROTECTION OF COMPUTER PROGRAMS THROUGH THE SYSTEM OF COPYRIGHT

The rapid development of digital infosfera by applying new information and communication technologies causes the appearance of new objects of intellectual property, like databases in all fields of knowledge and computer programs. [1]

In Bulgaria computer programs are object of copyright since the early nineties. In accordance with the Copyright and Related Rights Law (CRRL) Article 3, paragraph 1 " Object of copyright shall be work in the field of science, literature and art, which is a result of creative activity and is expressed by any ways or in any objective form, such as: literary works, including works of scientific and technical literature, political journalism and computer programs ". [2] At first glance this may seem odd, but this method of protection has serious advantages.

In order to unify the legal regulation of computer programs in Europe, The European Council voted Directive 91/250/EC for protection of computer programs on 14th May 1991, which was replaced by Directive 2009 / 24 / EC of the European Parliament and the Council from April 23, 2009 for the legal protection of computer programs. The repeal of the old directive and its replacement by a new one was provoked by multitude of amendments to the Directive 91/250/ESS during the years from its induction till the moment. Therefore imposed all new elements to be integrated with the new Directive 2009/24/EO which also preserves and updates the texts of old Directive.

Lack of adequate protection of computer programs in the laws of Member countries, the investment of considerable human, technical and financial resources in developing of computer programs that can be easily and qualitatively reproduced and used illegally, the increasing role of computer programs in developing European market, the differences in the mode and resources of protection for computer programs and etc. leads to the necessity for European countries to update their laws related to copyright, taking into account the recommendations of the Directive. According to Art. 1, item 1 of the Directive 'computer programs are protected by copyright as literary works according to the Berne Convention. [3] Art. 1 also specifies that the ideas and principles underlying in the computer program or in some of its elements are not protected by copyright, and that protection extends only to those programs which are genuine, and are result of the author's intellectual creation.

Bulgarian legislation has adopted the argument of the European Directive and its text is taken in determining the system of legal protection of computer programs.

In accordance with Article 3 of the aforementioned CRRL we have three main criteria which have to fulfill t a work to enjoy the provided legal protection:

- to be a work of literature, art and science - this is the criterion on which computer programs are absolutely responsible.

Here, however, the dispute arises, whether the software is inherently much more a product of science rather than literature. Namely this formulation is faced with the legal fiction of Art. 1 of the Directive and Art. 3, par. 1, item 1 of the CRRL, according to which a computer program is treated as a literary work. This compromise is necessary in order that one of the new objects of copyright can be used with an already developed system of principles applicable to one of the oldest objects of protection - literary works, rather than having to develop new rules.

The second criteria which must fulfill a work is:

• to be a result of creative activity - and on this criterion, there are many disputes that are not focused on how the computer program fulfills this requirement, but rather the correctness of the wording of this principle.

According some authors, the term "creativity" or "creative activity" is incorrect and it’s more literary than legal content, and that its interpretation in the absence of legal definition, can lead to misjudgment about which objects to be protected and which - no. [4] But other authors argue that the term "result of creative activity" contains within itself implicitly the criteria of novelty and originality work and danger lies not in determining the objects of copyright protection. [5] In support of this assertion is art. 1, par. 3 of the Directive, which says, "The computer program is protected if it is original in the sense that it is their own intellectual work of the author." [3]

Despite different opinions, it is undisputed that it is a distinction between a new and original work, the result of intellectual creativity of the author, from literal copying or reproduction of an existing product.

The last of the three criteria that need to fullfill a work is:

• to be expressed in any way and in any objective form

Our legislation follows the European legal conception under which a work is sufficient to be embodied in a form that is or can be objectively perceived, for it to be the subject of protection of copyright. The way of expression and the form in which the work is objectified are not important. Computer programs fulfill this criteria admittedly too.

However, computer programs that fully fulfill those criteria and there can be no doubt to them if they are objects of copyright or not, our legislature has considered it necessary to explicitly indicate them in the non-exhaustive list of protected object of art. 3, par. 1, item 1 of the CRRL.

2. PROTECTION OF COMPUTER PROGRAMS BY PATENT LAW

In the patenting of computer programs appear two main problems:

• The majority of industrial property laws in the world specifically exclude computer programs as such from the circle of innovation.

• Another issue is whether the patenting of computer programs are technical in nature and represent a technical solution to a problem such inventions.

In the Republic of Bulgaria computer programs are specifically excluded from protection in the Law of Patents and Registration of Utility Models (LPRUM), they are not considered as inventions to some extent. [6] But the exclusion applies only to cases in which protection is sought for them as such. Which means that a computer program can be protected as an invention by the Bulgarian legislation, if it fulfills certain conditions. These conditions are:

• Program is not applied to itself;

• The program is part of or be incorporated in the invention (technical device, method) in order to proof of a technical nature);

• Invention, which is incorporated into the program to fulfill the criteria for patentability.

3. ADVANTAGES AND DISADVANTAGES OF VARIOUS MEANS OF PROTECTION

Advantages and disadvantages of the two main mechanisms of protection of computer programs need to be addressed in the following aspects:

• procedure for protection;
• scope of exclusive rights;
• duration of protection;
• the opportunity to prosecute offenders.

Procedure for protection

In terms of procedure for protection of computer programs more beneficial to the creators of the software is a copyright protection mechanism. It is automatically provided at the time of the creation of the program and her expression. While protection of computer programs by patent law is necessary to go "heavy" process expertise, in addition to the presence of the criteria for patentability of computer program will need to demonstrate a technical nature and find ways for incorporating the program in technical device, method or system.

However there are some drawbacks from protection through CRRL, because it's more difficult to prove the moment of the creation to the program if there is a dispute on its authorship. While the patent protection beginning is evidenced by the date of the patent document.

Scope of exclusive right

Rights of authors of computer programs under CRRL are:

• moral;
• property.

According to Article 15 par. 1 of the CRRL, the moral rights of authors of computer programs are as follows:

- The author has the right to decide whether it created programming to be disclosed and to determine the time, place and manner in which to do so;

- The author has the right to seek recognition of his authorship in the program;

- The author has the right to decide whether its program to be disclosed under a pseudonym or anonymously;

- The author has the right to ask his name, his pseudonym or other identifying copyright mark it to be labeled appropriately with any use of the computer program;

- The author has the right to ask for preserving the integrity of the work and to oppose any changes to it

- The author has the right to change the program if this does not infringe the rights acquired by others;

- The author has a right of access to the original computer program, where she is in possession of another person

- The author has the right to suspend the use of the program due to changes in their beliefs as to compensate victims who have legally acquired the right to use the program.

According to Article 18 paragraph 1 of the CRRL property rights associated with the use of the computer program and authorization of use by other persons to whom the author is entitled to seek and obtain compensation. For acts of exploitation shall be considered: the reproduction of computer programs, broadcasting of the program, the computer program broadcast by wireless means, the processing of the computer program, computer program for translating into another language (from one computer language to another would be a translation of the program); demand in the wireless router, cable or other technical means of access to an unlimited number of persons to the computer program.

The holder of a patent for an invention in which the incorporation is a computer program, according to Art. 19 of LPRUM acquires exclusive rights, including the following powers: the right to use the invention, the ban others from using it without the consent of the patentee the right to dispose of the patent.

In terms of scope of protection can be said that both options provide significant protection to holders of rights to commercial use of computer programs and make a profit from such use. Copyright protection measures in use are detailed, unless expressly included and rights of users of computer programs. And although the approach of determining the scope of exclusive rights in patent law is different, it was clearly demonstrated what can make the owner of an exclusive right protected by the computer program.

Term of protection

The term of copyright in a computer program has a duration of life of the author plus 70 years after his death. For computer programs created within the employment relationship, the period is 70 years after their disclosure. The term of protection of the invention, which is incorporated in the computer program is 20 years from the date of filing.

There is no question what kind of protection is more appropriate from the viewpoint of the criterion duration of protection - copyright. But in view of

the high speed at which computer technology is evolving and changes in the incidence of end products, which is within months, the period of protection of computer program patent also is not small at all.

Opportunity to prosecute offenders

In the CRRL and in LPRUM, offenders are considered for those who perform actions with the object of protection without the author's consent or in violation of the provisions of law. In CRRL said that "who violate copyright or related right, due to the rightholder or the person to whom it is granted to the exclusive right to use damages. While in LPRUM "any use of the invention which comes within the scope of patent protection and is made without the consent of the patentee is a patent violation. Although the texts are different in itself is a meaning to them.

There are two main issues in prosecuting violators of the rights to computer programs and CRRL, and LPRUM:

• Which individuals will be considered for offenders in respect of acts committed without the consent of the author, or which are inconsistent with the statutory provisions to the protected site;

• Which individuals will be considered as such in respect of acts done without the author's consent or in violation of the law, in view of the scope of exclusive rights.

Copyright does not protect ideas, but the shape of the object, how the external expression of the idea in the case of computer program code, which is painted. The exclusive right of the author of computer program results in a prohibition on copying and commercialization of this code. Copyright protects computer programs as such and such violators will be pursued those who just play the protected computer program and / or take action without the consent of the author (in violation of law) with this computer program.

But copyright does not protect the idea embodied in software, and how the machine works with this software. Ideas, practical knowledge embodied in the facility can be protected only by patent law. In patent law the scope of legal protection is defined by the claims. A claims cover not only as expressed, but their equivalents. Which means that the scope of protection of the computer program under patent law is not only the exact copy and use the computer program without the consent of the patentee, but also on the equivalent of the attributes of a computer program expressed in the patent claims.

An element is considered equivalent to an element as expressed in the claims where:

• perform essentially the same function in the same manner and gives essentially the same result;

• a specialist in the field is obvious that the priority date of the result obtained by the element, expressed in the claims can be obtained by the equivalent.

From this perspective, patent law provides better opportunities for the prosecution of offenders compared with the system of copyright.

In view of the scope of the exclusive right, even though both laws provide a wide range of rights for creators of computer programs, opportunities to prosecute violators differ. In the copyright protection measures of use are detailed and comprehensive. Which means that if possible other action against the protected computer program falling under the scope of the actions described in the law, the person performing the action, will hardly be considered in default. While patent law in action within the scope of use of the computer program are not exhaustive and is listed as a possible violators must be prosecuted and persons engaged in acts contrary to laws which are not specifically mentioned in the law, but are using computer program.

The issue of protection of computer programs is still controversial and internationally and nationally. The choice of method of protection for computer programs is a matter of discretion on the part of their creators and goals to pursue. Bulgarian legislation allows the accumulation of protection that allows the creators of computer programs to take advantage of all the advantages of both types of protection and eliminating their disadvantages.

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