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Эффективные методы защиты результатов интеллектуальной деятельности в инфосфере глобальных телематических сетей

Цель статьи – совершенствование используемой методологии технологической и организационно-правовой защиты результатов интеллектуальной деятельности и соответствующих интеллектуальных прав в информационной сфере глобальных телематических сетей (типа Интернет, Релком, Ситек, Sedab, Remart и др.). На основе проведённого анализа особенностей и возможностей применения различных методов и способов технологической и организационно-правовой защиты информационных объектов сформулированы предложения по совершенствованию соответствующего организационно-правового обеспечения. Эффективность защиты обеспечивается на основе рационального комплексирования возможных технологических и организационно-правовых методов в условиях конкретной ситуации.

Ключевые слова: *интеллектуальная деятельность, результаты, эффективная защита, технологические методы, организационно-правовые методы, интеллектуальные права, информационные правоотношения, информационная сфера, глобальная телематическая сеть.*

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Effective methods of protection of the intellectual activity results in infosphere of global telematics networks

The purpose of this article is perfection of using metodology of technological and organization and legal protect of intellectual activity results and related intellectual rights in information sphere of Global Telematics Networks (such as of «Internet», «Relkom», «Sitek», «Sedab», «Remart», and others). On the conduct analysis base of the peculiarities and possibilities of using of different technological, organization and legal methods and ways protection of information objects the offers of perfection of corresponding organization and legal safeguarding are formulated. The effectiveness of the protection is provided on the basis of rational aggregation technological, organization and legal methods and ways possible in a particular situation.

Keywords: *intellectual activity, results, effective protection, technological methods, organization and legal methods, intellectual rights, information legal relations, information sphere, global telematics network.*

Economical, organizational and legal control of turnover of intellectual activity results (IAR) includes risk management in the creation, deployment, as well as for IAR distribution [1], in particular, through the Global Telematics Networks.

The Global Telematic Networks (GTN) concentrates an enormous volume of multi-aspect information: educational, scientific, informative, cultural, social and legal, political and etc. At the same time the GTN are a wide arena for "information weapon", "intellectual piracy", unauthorized access through covert channels [2, 3] and other illegal actions, resulting considerable material and moral damage in the conditions of the development of innovation economy. There are a lot of cases of infringement of intellectual property in the GTN information sphere (infosphere), i.e. of the intellectual (copy, related, invention, patent and etc.) rights. That fact stipulates for the actuality of the multiaspect problem of their protection, including the technical and legal problem of proof of the infringement of intellectual rights to corresponding information objects of the intellectual property (IAR) placed on and distributed through the GTN.

There are known the methods and means (*see Table*) of technical (individual, public, etc.) and legal (by their form: non-juridical – extrajudicial; juridical-judicial, administrative) protection (taking a complex of general and special organizational, technical and legal measures) of the IAR placed on (published) and distributed through the GTN in information objects form, and intellectual rights to such objects, which combined application may provide for effective protection of the intellectual rights taking into account the *specifics* of the global network (uncertainty of its legal status, mass character and geographic distribution of accessibility, exterritoriality and collective-"network" use of the IAR – objects of intellectual property, practical complicacy of revealing of the infringer, optionality of the registration of the objects of copy rights, vague definition of the applied jurisdiction, etc.).

Methods of "self-protection"

Before placing IAR as the object of intellectual property in the GTN infosphere, the rightholder (author)

may apply different technical and organizational methods aimed at the protection of his intellectual rights, i.e. methods of "self-protection". In particular, certification (technical and notary) of intellectual rights, provision of technical security [2] of the objects of intellectual property.

In practice, most often the process of authorship proof rests upon the so-called *presumption of authorship* and comes to presentation of the earliest created copy of the IAR where the author is indicated. However, if the third persons submit an earlier copy of the object of intellectual property, the right to authorship should be proved judicially. In order to avoid such situation, it's necessary to certify notarially the copy (content) of the information object of intellectual property (such service in the GTN is rendered by «network» notaries), or to deposit a copy in a special archive of the Web-depositary or in one of the organizations offering such service, for example, Russian Authors Society.

It is possible to register a program code of the GTN-site where the information object of intellectual property is placed, with Rospatent (Federal Service for intellectual property, Patents and Trademarks). To protect the information object (IAR) of intellectual property after due certification of the intellectual rights (copyrights and etc.) it is also possible to use (in particular, according to Art. 1299 of CC of RF) different *means of technical protection* allowing to prevent the infringements of the intellectual rights in the GTN, including:

– information and computer technologies, permitting to restrict copying or impose other restrictions (for example, limiting the period during which you can view or play the protected IAR as information objects);

– information and software and firmware that impede the creation of copies of protected information objects in electronic form or allow the creation of such copies track (encryption, establishing "water" marks in the electronic copies of the protected information object);

– information and technical means, permitting to restrict and track the use of the protected IAR (monitoring of unique identification of the "electronic signature" of the protected information objects).

To place the IAR as the information object of the intellectual property in the GTN infosphere the rightholder (author) has to provide the connection of his computer with the local network of the GTN service provider (a juridical entity or a sole proprietor), which provides services connected with the access to the GTN. At that, the information *legal relationships* [2] between the GTN service provider and the rightholder (author) concerning the placement and distribution of the information object, submission and payment for the provider's services are regulated by corresponding civil law agreement.

The provider renders on the basis of the agreement and authorization document issued to it by authorized state body, the services on access, protection, submission and distribution of the information about the IAR as the object of intellectual rights in the network, by establishing the *information and legal regime* [2] stipulated in the agreement (legal regime of the information object of intellectual property), which foresees the authorized by the

Table

Classification of methods and means of IAR protection in GTN infosphere

Kind of IAR protection	Methods and means of IAR protection as information objects of the intellectual property					
	Stages of the "life cycles" of IAR					
	Placement in GTN infosphere	Legally use	Violation of intellectual rights	Perpetuation of evidence	Trial	Execution of judgment
Technical	**Certificate of Origin** (copyright) **Deposit of copy** (Web-depositary, RusAS) **Registration of Origin** (Rospatent)	**Copy control** (counter, timer) **Complication copy** (ciphers, "water" marks) **Monitoring** ("electronic signature")	**Print evidence** (web-pages, log-files, whois-service, host-server site) **Certifying the electronic evidence** (EDS or QES)	**Video and audio recording** (film, photos, slides, speech) **Collecting physical materials** (magnetic storage, flash-кcards)	**Consulting** (demonstration of electronic evidence on the computer)	**Publication of the judgment in the network** (e-mail listing)
Organization and legal	**Certifying the rights to IAR** (notaries, "net-work" notaries)	**Civil contract** (legal protection regime, a code of ethics) **Information co-operation** (agreements, contracts)	**Certifying the Evidence** (notary, "net-work" notary) **Requirement doesn't violate the rights** (claim letter)	**Notarial acts: inspection, examination, expertise** (protocol) **Claim maintenance** (prohibition, counterfeit seizure) **Interrogation of parties, third parties** (explanation) **Examination of witnesses** (testimony site administrator, web-master)	**Requirement to protect the rights** (petition) **Consulting** (written advice, in the record of the meeting) **Expertise of electronic evidence** (conclusion) **Enforcement decision** (judgment)	**Recover damages or financial compensation** (writ) **Suppression of unlawful acts** (penalty)

rightholder option of access (open, paid, upon royalty payment, etc.) to the IAR and legal duplication and distribution of the electronic materials both on the territory of the Russian Federation and abroad, i.e. realizing a complex of legal measures of administrative protection, as well as additional measures of technical protection.

The additional organizational and legal measures of protection may be the mechanisms of international, regional and civil *information cooperation* [9] oriented at the development of the rules of professional network ethics, as well as at the resolving of jurisdiction problem in the network, of applicable law, etc.

Methods of revealing of infringers

There are different methods of revealing of infringers with the use of the system of identification of computers connected to the GTN, including the system of IP-addresses and the Domain Name System. The identification of the infringer is possible in the way of detection of the IP-address of the computer from which the illegal actions have been taken (putting on its owner the burden of proof of the fact of improper use of the computer by third person), and by applying to the administrators of the domains of three different levels of hierarchy.

In case of obstacles on the way of collection of the data on the infringer from the side of the domain administrators, the plaintiff may bring an action against the administrator of the domain of the website where the information prejudicing the right and legal interests of other persons is placed. According to the "Regulations and tariffs for the services on registration of the second-level domains in .RU zone" (as in force since April 1. 2001), the "Rules of domain name registration in .RU zone" (since October 1. 2009), the "Rules of domain name registration in .РФ zone» (since November 11. 2010) all liability for the whole domain address space (tor conflict situations, domain use for illegal purpose, etc.) is borne, in the first place, by the domain administrator. Consequently, the domain administrator is the person who is formally liable for the infringement of intellectual rights in the GTN, its participation in the court proceedings is obligatory.

It is possible to identify the infringer on the basis of the data of *whois*-service – being the register of the registrar of the domain names in the Russian GTN segment (example, *www.nic.ru*) – by determining the name of the administrator of the second-level domain being the address of the corresponding website, the name and the location of its GTN service provider, etc.

The evidence of guilt of the authorized persons is the *Log*-files containing the information on what authorized person, what time and how has performed an action with the website files on the server. It's possible to identify the person who bears responsibility for all actions executed by him or in his name by the manner of authorization.

The pretrial proceeding of providing electronic evidence represents the bringing the matter before the notary or court. At present, in order to give more evidential force to the printed pages from the GTN websites, it is used the *certification* of such evidence by notary, who himself logs to the respondent's GTN-server, registers as a user and compares the data contained there with the submitted data.

Upon revealing the infringer and provision of the electronic evidence, the owner of the intellectual rights may apply to the infringer with a request (according to Art. 1301 of CC RF) to eliminate the conditions, which infringe his right and/or to reimburse the losses (to pay compensation). The letter of claim establishing the term for voluntary elimination of infringement of intellectual rights (copyrights, etc) and/or payment of compensation, may be sent via e-mail.

In case the infringer doesn't eliminate the infringement of the intellectual rights (copyrights, etc.) within the established term, the rightholder (author) may bring an action before the court. The applicant may indicate as claims: declaration of rights, restriction of actions, recovery of damages and compensation. In particular, the requirements to the statement of claim are regulated in detail by the provisions of the Code of Arbitration Procedure of RF and of the Code of Civil Procedure of RF.

Methods of judicial protection

The judicial protection of rights on IAR – is the taking substantive measures of compulsory character through which the restoration (recognition) of infringed (objected) intellectual rights and the infringer treatment are executed and matching measures and provide research evidence, including trial consulting, technical expertise, adoption and enforcement of the judgment, determining specific measures statutory legal liability.

Trial consulting (part specialist in litigation) is used in cases (in particular, according to Art. 188 of CCP of RF) where necessary specialist advice, explanations and provide direct technical assistance (photography, drawing up planes and schemes, sampling AH examination, etc.), and it seems necessary when using technical means to play and study of electronic documents as evidence. In cases where it is impossible to assess the trustworthiness of simple visual inspection and importance (wholeness and relevancy) and cumulativeness (selectiveness and homomorphism) [2] of electronic documents as evidence appointed *technical expertise*.

For violation of intellectual of rights on IAR, placed and distributed in the GTN infosphere, legislation establishes criminal, administrative and civil liability. Criminal liability – fine, arrest, imprisonment (Art. 146, 147 of CC of RF), administrative liability – administrative fine, confiscation of guns or the subject of the information offence (Art. 7.12 of AC of RF); civil liability – suppression of unlawful acts, the discontinuation of the legal entity or individual entrepreneur, compensation in kind, compensation to damages, compensation, seizure and destruction of infringing materials without compensation, destruction of equipment due to the offender (Art. 12, 1082, 1302, 1252 of CC of RF), compensation of non-pecuniary damage (Frt. 151 of CC of RF).

The court decision which came into legal effect is published in the GTN infosphere and is obligatory for fulfillment by the persons to whom it is addressed. The decision is executed, excluding the cases of immediate execution, in the order fixed by legislative acts regulating the matters of execution proceedings. At that, the direct obligation of the provider is to cancel (delete, block) the access to the information object (IAR) recognized by the law as illegal, as after reception of the court decision the provider gets informed on illegality of such information object.

Methodical recommendations

The analysis of the particulars and possibilities of improvement and application of the known technological and legal methods and corresponding organizational and legal provision of intellectual rights (copyrights, etc.) on the IAR protection in the infosphere of the GTN, made it possible to formulate the following expedient suggestions to provide the efficiency of the complex protection to be implemented at the state level:

– to provide general harmonization of the national legislations and elaboration of a sole international approach to the problems arising in the course of use of the IAR in form of information objects of intellectual property in the infosphere of the GTN, which may ensure a definite level of protection of intellectual rights on the IAR;

– to legislatively fix the legal status of the IAR as information object of intellectual property placed on and distributed in the infosphere of the GTN;

– to impart evidence force to the multi-aspect electronic digital information (information objects, arrays, records, etc.) placed on and distributed in the GTN to meet the requirements of the legislation to electronic documents;

– to introduce into the evidence model of the legal proceedings special juridical mechanisms which provide equality of electronic and written evidence, i.e. to impart autographic status to EDS (Electronic Digital Signature) or QES (Qualified electronic Signature);

– to widen the subject field for objective side of information infringements and crimes in the Code of Administrative Violations of RF, in the Criminal Code of RF. and in the Code of Criminal Procedure of RF, correspondingly;

– to supplement the existing procedural legislation with the regulations which reflect the modem state of electronic technologies and the GTN, establishing, in particular, the limits of evidence permissibility obtained by the means of electronic technologies (tor example, print-outs of webpages, etc.);

– to fix legislatively the rights and obligations of the persons being the subjects of information exchange in the network (rightholders. GTN service providers, website administrators, owners of GTN-cafe, etc), concerning claims and demands, liability, participation in court proceedings, investigative actions undertaken by the law enforcement bodies, which supposes the introduction of corresponding changes into the Code of Civil procedure of RF, into the Code of arbitration procedure of RF, into the Code of Criminal Procedure of RF and into the Federal Law “On operational activities”.

It seems expedient to work out within the scope of a special research, a scientifically grounded methodology of efficient intellectual right (copyrights, etc.) infringement proof in the GTN infosphere which will base on such fundamental principles as, the concept of justice of court proceedings within reasonable terms, principle of legality consolidation and prevention of infringements of intellectual rights in the GTN infosphere, as well as on scientifically grounded criteria of the process of proof in courts: which takes into account the requirements of the Russian and international legislation, practical experience of consideration by the Russian and foreign (Austria, Germany, USA, etc.) courts of the disputes arising in case of infringement of intellectual rights in the GTN infosphere, the particulars of collection, submitting and consideration by courts of electronic documents, as well as possibility of extrajudicial, for example through mediation, settlement of such disputes.

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