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# THE USE OF INTELLECTUAL PROPERTY AND DIGITIZATION: LEGAL ASPECTS

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### *Abstract*

Intellectual property as an innovative result and economic resource acquires specific importance in the digital reality conditions. The use of intellectual property by enterprises secures competitive advantages, growth of economic ratios, increase in efficiency of business processes and production. An updated regulatory framework for recording and transfer of rights to objects protected as intellectual property is required for effective use of intellectual property in the digital environment. This article reviews the following legal aspects of intellectual property use in the Russian Federation: peculiarities of a regulatory framework for building an efficient system of intellectual property use; establishment of the legal bases for deployment of innovative intellectual property management systems; application of the legal institution of open licenses for efficient intellectual property use in conditions of digitization. The following methods have been used to carry out the research: general scientific ones – analysis, synthesis, comparison, generalization of legal acts and legal doctrine, making it possible to identify some relevant aspect of legal regulation of relationships concerning intellectual property use; as well a private scientific formal and legal method. The formal and legal method is used to define and characterize the concepts of intellectual property and open license. A conclusion is made that an efficient system of intellectual property use in the Russian Federation is currently built with the active participation of the government, which creates legal regulation bases on the legislative level.

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**Keywords:** Intellectual property, blockchain, open licenses, digital rights.



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## 1. Introduction

The issues of intellectual property use appear relevant in the modern conditions of digitization. Intellectual property represents a special object of civil rights: these are intangible results of intellectual activity expressed in an objective form, protected by virtue of law. In the laws of the Russian Federation, protected intellectual property objects are named in Article 1225 of the Civil Code of the Russian Federation (part 4) No 230-FZ of December 18, 2006. Intellectual property is viewed as the most important economic resource, a basis for innovative development in the Russian Federation as well as in foreign countries. The digital economy development is associated with the use of modern technology including big data, neurotechnology, artificial intelligence, distributed ledger system (blockchain), quantum technology, robotics, sensorics, wireless communications, virtual and augmented reality, etc., which also constitute intellectual property (Suslova & Erokhina, 2018). This explains the increased attention paid by the government to the issues of legal regulation, management and use of intellectual property in the digital economy establishment conditions.

## 2. Problem Statement

Digitization of relationships between people concerning tangible and intangible objects is a result of achievements of the scientific and technological progress of the latest decades (Nevinskiy, 2019). Scientific publications use this term in a broad and narrow sense. Digitization in the broad sense is a modern world vector of the development of the economy and society based on transformation of information in the digital form and leading to an increase in efficiency of economics and life quality improvement. Digitization in the narrow sense means transformation of information in a special digital form allowing prompt information processing (search, obtainment, processing, storage and distribution of information) and making it accessible by users in the real-time mode (Khalin & Chernova, 2018). Scientists all over the world study the issue of intellectual property use in the modern information and digital technology development conditions. Kur and Maunsbach (2019) review the issues of compliance of international and national laws with the modern information environment and information technology challenges, Afoaku (2017) studies exercising of copyrights in augmented reality conditions, Barbu and Militaru (2019) issues of innovation development and intellectual property rights in the production, Lemley and Volokh (2018) research law in virtual and augmented reality, Vishwakarma and Mukherjee (2014) write about protection of intellectual contents in digital era, Senchenia (2019) analyze the issues of efficient intellectual property use in Russia. It appears that the study of the issues of intellectual property use in conditions of digitization should be continued in view of its world relevance, although peculiarities of the regulatory framework of such relationships in the Russian Federation need to be taken into account

## 3. Research Questions

Let us address the following questions within the framework of this study:

- What role the state policy plays in creation of an efficient system of intellectual property use in conditions of digitization in the Russian Federation;

- How the intellectual property use is regulated within the framework of innovative information systems (blockchain);
- How the free licensing procedure aimed at the use of intellectual objects in the digital environment is regulated.

#### **4. Purpose of the Study**

The purposes of this study are:

- Determination of peculiarities of the regulatory framework for building an efficient system of intellectual property use in the Russian Federation at the present stage;
- Determination of how the legal bases of deployment of innovative intellectual property management systems are formed;
- Determination of the importance of the legal institution of open licenses for the efficient intellectual property use in conditions of digitization.

#### **5. Research Methods**

The following methods have been used to carry out the research: general scientific ones – analysis, synthesis, comparison, generalization of legal acts and legal doctrine, making it possible to identify some relevant aspect of legal regulation of relationships concerning intellectual property use; as well a private scientific formal and legal method. The formal and legal method is used to define and characterize the concepts of intellectual property and open license.

#### **6. Findings**

The first aspect to be reviewed is the state policy role in the creation of an efficient system of intellectual property use in conditions of digitization. The main state policy areas are outlined in Order of the President of the Russian Federation No. 204 of May 7, 2018. On National Aims and Strategic Tasks of the Development of the Russian Federation for the Period till 2024. A national program stipulating implementation of the federal project Legal Regulation of the Digital Environment has been developed based on the indicated document (The Digital Economy in the Russian Federation program approved by Resolution of the Government of the Russian Federation of July 28, 2017). Pursuant to the above mentioned document, regulatory framework of the digital environment should be built taking into account the specifics of regulation and introduction of digital technology in civil law transactions. This is the reason for reformation of the segments of civil laws of the Russian Federation concerning the transaction form. The electronic transaction form is now viewed as a variation of the written form, which largely simplifies intellectual property circulation.

Moreover, digital rights are named in Article 141.1 of the Civil Code of the Russian Federation (part 4) No 230-FZ of December 18, 2006. In the context of rights arising in relation to intellectual property, it can be noted that the holder of a digital intellectual right may dispose of such right according to the rules of the corresponding information system. Availability of digital rights allows their subjects taking part in transactions made electronically, transferring the management of the rights, registering the rights.

Therefore, let us focus on the second aspect of the study and note that the above mentioned civil law provisions give an opportunity to use intellectual property within the framework of innovative information systems based on the blockchain technology. It should be noticed that the IPChain platform has started functioning in the Russian Federation in view of the implementation of the Digital Economy national program; the IPChain platform is an infrastructural solution for the arrangement of circulation of intellectual property rights and objects built on the distributed ledger principles. Creation of the IPChain platform has been initiated by the World Intellectual Property Organization, the Foundation for the Development of the Center for Elaboration and Commercialization of New Technologies (the Skolkovo Foundation), the National Research University Higher School of Economics, the Russian Union of Right Holders, the Saint Petersburg Research University of Information Technology, Mechanics and Optics, the Russian Authors Society, the Partnership for Protection and Management of Rights in Art and the New Age bank. The Federal Intellectual Property Service is currently taking part in the operation of the platform. Moreover, the Intellectual Property Rights Court of the Russian Federation has signed the IPChain cooperation agreement. IPChain is using the blockchain technology. The latter implies that confirmed and verified transaction groups are stored in blocks interrelated in a chain starting from the first block, such chain being resistant to unauthorized tampering and allowing only to be supplemented. The system covers registration of an intellectual property object, conclusion of license and right alienation agreements, transfer of management of rights.

Taking note of positive aspects related to the introduction of distributed ledger technologies in intellectual property, experts in intellectual law doubt that there is a possibility to replace centralized registers of intellectual property objects maintained by the Federal Intellectual Property Service. Thus, Orlova (2019) observes the “risk of violation of technological neutrality of legal regulation as the system should reflect the legal reality rather than replace it. Therefore, there arises a problem of public reliability of such registers” (p. 9). Indeed, legitimation of processes in a distributed ledger requires determination of the status of operators of such register and their responsibility for reliability of the data, etc. contained therein.

It is worth emphasizing that there is no special law regulating functioning of information systems based on a distributed ledger in the Russian Federation. Adoption of a Bill of Federal Law No. 419059-7 On Digital Financial Assets and Amendment of Some Legal Acts of the Russian Federation (on Digital Financial Assets), where blockchain legitimation has been planned, is suspended.

Federal Law No. 149-FZ of July 27, 2006 On Information, Information Technology and Information Protection in place in Russia covers functioning of the blockchain information technology. Provisions of the Civil Code of the Russian Federation regulate the procedure for conclusion of transactions in the electronic form. Besides, provisions of Federal Law No. 152-FZ of July 27, 2006 On Personal Data are applicable within the framework of observance of rights to personal information.

Thus, legal bases for the introduction of innovative systems of intellectual property management are currently formed by a complex of legal provisions regulating civil, information, personal data protection relationships. Special attention should be paid to free licensing aimed at the use of intellectual objects in the digital environment. This is especially relevant for the so-called creative industries: industrial design, architecture, movie making, television, software development, where intellectual property is created thanks

to the man's creative potential (copyright, patent law) (Agamagomedova & Nadkina, 2019). The indicated branches needed a mechanism allowing regulation of the intellectual property use as quickly as possible. A legal institution of an open license is currently available in provisions of applicable civil laws. This legal institution has been unknown to Russian copyright before, although widely developed in the legal and law enforcement practice of some foreign countries, in particular, the USA, Great Britain, etc. Currently, these licenses are also used in other countries, such as Ecuador (Bustamante-Granda & Quiroz-Castro, 2019).

Licenses developed by private public organization Creative Commons have become the most popular in the Russian Federation (Grin, 2014). Creative Commons licenses are viewed by experts as free licenses differing from traditional license agreements built on the All Rights Reserved concept by virtue of their "free" character being based on the Some Rights Reserved concept.

This license type represents a mechanism allowing legal circulation of protected results of intellectual activity in the information environment, primarily, on the Internet information and communication network (Patricia & Ramadhan, 2019).

Pursuant to the currently applicable rules contained in the provision of Article 1286 of the Civil Code of the Russian Federation (the "CC RF"): an open license is understood as a license agreement concluded in a simplified form, whereunder the author or other right holder (licensor) provides the licensee with an ordinary (non-exclusive) license for the use of research, literary works or works of art. Some important aspects concerning an open license in copyright should be noted: an open license is an accession agreement; it may indicate actions that if carried out will be considered license acceptance; the licensor may provide the licensee with a right to use the work owned by the licensor to create new results of intellectual activity; according to the general rule, it is compensation-free; the licensor providing an open license may cancel the agreement in full or in part on a unilateral basis if the licensee provides third parties with rights to use the work owned by the licensor or to use another result of intellectual activity created by the licensee based on such work beyond the scope of rights and (or) on other conditions than stipulated by an open license; if duration of an open license is not defined, the agreement is considered concluded for the whole duration of the exclusive right in respect of software and data bases and for five years in respect of other types of works; an open license is ordinary (non-exclusive).

Such structure of open license attributes attests to the possibility of the use of an open license not only in respect of objects in a digital form placed on the Internet, but in respect of all other copyright objects as well. It appears that an open license may be used for objects of related rights and in publishing (Liu, 2016). Application of open licenses in respect of objects protected by patent law is regulated by provisions of Art. 1368 of the Civil Code of the RF. In this case, the open license mechanism (judging from the object specifics) is attributed to filing of an application to the Federal Intellectual Property Service (Rospatent) for provision of any person with a right to use an invention, utility model or industrial design. The following attributes may be referred to the ones of an open license in patent law: the patent holder informs the federal executive intellectual property authority of the terms and conditions of a license whereunder a right to use an object may be provided to any person; the federal executive intellectual property authority publishes the corresponding data about the open license at the patent holder's expense; the patent holder has to enter into a license agreement on provision of an ordinary (non-exclusive) license with the person wishing to use the object; the patent holder may address the federal executive intellectual property authority with a motion for

revocation of the open license application if within two years from publication of the data on the open license the patent holder received no written proposals for conclusion of a license agreement on the conditions contained in the application.

It is worth noting some general aspects concerning open licenses regulated by provisions of copyright and patent law. Firstly, the public character of the offer, secondly, the non-exclusive character of the license agreement, thirdly, the option of unilateral agreement cancellation and/or revocation of an agreement conclusion application. It appears possible to deal with open licenses on the IPChain platform.

## 7. Conclusion

The carried out research enables the following conclusions:

- An efficient system of intellectual property use in the Russian Federation is currently built with the active participation of the government, which creates legal regulation bases on the legislative level;
- Legal bases for the introduction of innovative systems of intellectual property management are currently formed by a complex of legal provisions regulating civil, information, personal data protection relationships due to the absence of any special law on blockchain technologies;
- Introduction of the open license institution in civil law of the Russian Federation may be considered a promising step towards more efficient regulation of intellectual property object use relationships including in the information environment and on the Internet. This refers to fundamentally new approaches towards the use of protected intellectual property objects based on permissions rather than prohibitions. In this respect, the open license mechanism seems quite successful.

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