

ARTIFICIAL INTELLIGENCE

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“Artificial Intelligence” Technologies in the Mechanism of Contractual Regulation in the Russian Federation

Liudmila Yu. Vasilevskaya, Ekaterina B. Poduzova

Kutafin Moscow State Law University (MSAL), Moscow, Russia

Abstract: “Artificial intelligence” technologies (AI technologies) are becoming popular objects of civil rights. Current legislation does not regulate relations on the creation of these results of intellectual activity and the turnover of exclusive rights to them. The current state of doctrine and law enforcement practice demonstrates the unresolved problems associated with the legal qualification of AI technologies, the definition of their legal regime, the use of various contractual structures for the creation of these innovative intangible objects and the turnover of exclusive rights to them. The purpose of the study is to consider the key civil scientific and practical problems of AI technologies in the mechanism of contractual regulation at the stage of establishing of legislation regulating digital relations. *Methods:* comparative legal method, rising from the abstract to the concrete, modeling, induction, deduction. Results and novelty: having realized the research objectives through the general scientific and private scientific methods described above, the authors considered AI technologies as independent results of intellectual activity and objects of civil rights. The factors influencing the construction of a system of contracts ensuring the turnover of exclusive rights to AI technologies are identified, in particular, the need to include conditions on confidentiality of information, on the procedure for

applying a smart contract, methods of identification and authentication of the parties to contracts. A system of contracts has been developed to ensure the turnover of exclusive rights to AI technologies.

Keywords: “artificial intelligence” technologies; legal regime; establishing of digital legislation; system of contracts; creation of “artificial intelligence” technology; pledge; exclusive right

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Contents

I. Introduction	344
II. “Artificial Intelligence” Technologies: Problems of Contractual Regulation of Turnover Relations	345
III. Conclusion	350
References	352

I. Introduction

Modern marketplaces offer consumers “artificial intelligence” technologies (AI technologies) in various forms — digital devices, robots, bots, *etc.* For example, AI technologies are applied for provision of medical services (Lee *et al.*, 2022; Myers *et al.*, 2020, pp. 830–840). There are still no norms in civil legislation establishing the legal regime of these objects.

Both in doctrine and in practice, there is no consensus on what kind of contracts are applicable for the development of AI technologies and the turnover of exclusive rights thereto. The authors of this paper were among the first to propose a solution to these problems. The article establishes the relationship between the concepts of AI and AI technologies, and make conclusions about the legal regime applicable to each of these results of intellectual activity. Based on the analysis of modern legislation and business practice the paper presents classifications of contracts that ensure the turnover of exclusive rights

to AI technologies, as well as system-forming criteria (connection with property, target orientation, content features, in particular, conditions on the procedure for applying assurances about circumstances, smart contract, electronic form of the contract).

To substantiate their conclusions, we consider the key civil scientific and practical problems associated with AI technologies and propose ways to solve them. We analyze the current state of legislation regulating relations related to intellectual property, scientific doctrine and law enforcement practice; identify scientific and practical problems related to AI technologies, contracts ensuring the turnover of exclusive rights to these results of intellectual activity; substantiate the proposed solutions to these problems.

The definition of constitutive features of AI technologies, identification of features, as well as contract structures mediating the turnover of exclusive rights to these objects, was based on a system of methods consisting of a comparative legal method, a modeling method, and methods of rising from the abstract to the concrete, induction and deduction.

II. “Artificial Intelligence” Technologies: Problems of Contractual Regulation of Turnover Relations

The active involvement in the conditions of digitalization of the economy (Galiautdinov, 2020) of new innovative intangible products — AI technologies — in property turnover poses the problem of defining them not only as objects of civil rights, but also as their civil law regime. The legal regime makes it possible to understand what legal actions individuals and legal entities can perform with the object. Consequently, the choice and conclusion of a certain contract depends on the civil law regime (García-Monleón, Danvila del Valle, and Francisco Lara, 2021; Teker and Asena Deniz, 2020) of the object that is the subject of a specific contract.

The doctrine often identifies AI technologies either with AI itself, or with things — robotic devices (RD) which embed AI. This leads to the need for differentiating these objects and defining their concepts.

We believe that AI and AI technologies should be enshrined in the list of protected intellectual property results provided for in Article 1225 of the Civil Code of the Russian Federation. AI consists of intellectual rights objects of various legal nature — computer programs (copyright objects), algorithms and software (know-how), technical solutions (inventions), databases (complex and composite objects), *etc.* Each of these elements, performing certain functions in the complex structure of AI, is connected with the system forming, main structural component of this system — computer programs. All the designated structural elements of AI that are part of it, connecting with each other, form a complex object with properties that are not reducible to the properties of individual elements. The main task of this object is to serve as the basis for the development of the so-called end-to-end technologies — promising technologies that radically change all spheres of human activity (Vasilevskaya, Poduzova and Tasalov, 2021, p. 80). Such technologies include AI technologies.

AI as a complex structural entity with a new qualitative certainty, as a complex object of civil rights as part of the technology of AI plays the role of the main link determining the purpose and use of a single technology in various sectors of the economy (industry, construction, medicine, *etc.*). The immaterial nature of AI and AI technologies necessitates their materialization, since without an objective form of expression, they cannot arise as objects of intellectual rights, existing at the level of an idea, a plan.

The physical carrier of AI is a computer that comprises and runs all programs existing in a binary format, *i.e.*, in a digital form. For AI technologies, such a physical carrier is a robotic device (RD). The significance of RD as a physical carrier of a single technology is to serve as a technological basis for the application of AI in various spheres of human activity.

Due to their immaterial nature, the objects of civil turnover are not AI and not AI technologies, but exclusive (property) rights thereto. According to clause 4 of Article 129 of the Civil Code of the Russian Federation, the results of intellectual activity cannot be alienated or otherwise transferred from one person to another, since only exclusive (property) rights, as well as physical carriers in which intellectual

property objects have found appropriate embodiment, possess the property of turnover.

Therefore, it is necessary to distinguish between exclusive rights to intangible innovative products, on the one hand, and ownership of computer and robotic devices as things, on the other hand. Such a distinction is of fundamental importance. By purchasing physical media (computer or RD), the buyer does not become the copyright holder of AI and/or AI technologies. The transfer of ownership of a thing (computer, RD) does not mean the transfer of intellectual rights to AI and/or the technology of AI embodied in the computer and RD. This means that the real-legal mechanism of acquiring ownership of things is unacceptable for alienation and transfer of exclusive rights to AI and AI technologies.

The exclusive right, proprietary in nature, is the right to use the result of intellectual activity and the right to dispose thereof. Thus, the essence of the exclusive right to a single AI technology lies in the right holder's ability to decide the legal fate of this right. There are the following ways to do that. The first is to alienate it to a third party (an agreement on alienation of the exclusive right to AI technology). The second is to limit it, *i.e.*, to grant the right to use it to a third party (a license or sublicense agreement), or to transfer the exclusive right to pledge (an agreement on pledge of the exclusive right to AI technology) (Vasilevskaya, 2021, pp. 3–18). However, these contractual structures do not exhaust all possible ways of disposing of the exclusive right to AI technologies. We believe that depending on the *causa* of the contract in a certain system of contracts that ensure the turnover of exclusive rights to AI technologies, it is necessary to choose a contractual structure corresponding to it (*causa*) and conclude a specific civil contract.

When building a system of contracts ensuring the turnover of exclusive rights to AI technologies, it is necessary to take into account a number of factors. We consider the concept of a “contract” as a transaction agreement that generates a corresponding legal relationship as stated in Article 420 of the Civil Code of the Russian Federation. When executing and performing contracts that ensure the turnover of exclusive rights to AI technologies, it is necessary to take into account the ownership of exclusive rights to certain subjects of law to these objects, the absence of encumbrances and other restrictions of these

rights. The conclusion of contracts ensuring the turnover of exclusive rights to AI technologies, in most cases, takes place remotely. In these conditions, the electronic form of the contract, electronic signature, smart contract (program code) are subject to application, the parties to the contract interact with each other using their digital projections.

According to the criterion of connection with property (Article 128 of the Civil Code of the Russian Federation), these contracts can be divided into property and non-property. Among the property contracts in the studied area, we identified the following property contracts with organizational elements: an option agreement, as well as property contracts that ensure the turnover of exclusive rights to AI technologies, including organizational conditions (on confidentiality, on the procedure for applying an electronic signature, a smart contract (program code), remote identification and authentication of subjects). Organizational and property contracts also include a contract with open conditions.

Property contracts with organizational elements are mixed contracts. Mikhail Braginskiy (2007, pp. 61–62) rightly identifies the following features of mixed contracts: *“there must be at least two contracts whose elements are included in the content of a mixed contract”*; such contracts are understood as contracts that meet the characteristics of a named contract; *“the mixed contract itself does not belong to the named ones.”* At the same time, a mixed contract must be distinguished from a package contract (Sobchak, 1989, p. 64).

As to the focus on a certain legal result criterion David (2020) divides property contracts into the following types. These are, in particular, a contract for the performance of research, development and technological work on the development of AI technologies, a contract for the creation of AI technologies, an agreement on the alienation of the exclusive right to AI technology, an AI technology license agreement. It is also possible to single out a commercial concession agreement on granting the right to AI technology as part of a set of exclusive rights, a pledge agreement for the exclusive right to AI technology, an agreement for the management of a pledge of the exclusive right to AI technology, a trust agreement for the exclusive rights to AI technology, a contract on the transfer of authority to manage copyright and related rights on a collective basis. Among non-property contracts, we can distinguish

organizational contracts applicable in the field of ensuring the turnover of exclusive rights to AI technologies. These include a preliminary agreement, a framework agreement, a gratuitous option agreement, and a non-defined agreement on the organization of joint activities.

License agreements can serve as the main agreement, as well as a contract serving other contracts for the provision of services in the field of the use of AI technologies. For example, services for the introduction of AI technologies into the user’s activities can be provided not only by the copyright holder, but also by a third party. In this case, the copyright holder and a third party conclude an AI technologies license agreement so the third party has exclusive rights to introduce them into the user’s activities. A paid services agreement between a user and a third party should refer to this license agreement.

The license agreement acts as a kind of “maintaining” agreement for services agreement involving AI and AI technologies. According to the criterion of the scope of application, these agreements can be divided into the following specific groups. The first group includes a contract for the provision of paid services using AI technologies. This agreement is of a mixed nature, it includes elements of a license agreement. At the same time, as the Supreme Court of the Russian Federation rightly notes, the absence of special regulations of an indication for the possibility of an unmotivated unilateral refusal to execute the contract does not mean that the customer does not have such a right.¹ When using software for the operation of RD using SaaS technology (remote access technology), a user service agreement is concluded for the purpose of remote application of the software² (the second group of contracts). This agreement also includes elements of the license agreement. The third group includes a contract for the provision of paid services by the copyright holder (or a third party) for

¹ Review of the judicial practice of the Supreme Court of the Russian Federation No. 1 (2018) (approved by the Presidium of the Supreme Court of the Russian Federation on March 28, 2018). SPS “ConsultantPlus”. (In Russ.). Available at: <http://www.consultant.ru/> [Accessed 30.03.2022].

² Public offer on concluding an agreement on providing access to software according to the SaaS model. Available at: https://b2b-connect.ru/media/documents/offer_SaaS.html [Accessed 30.03.2022].

the introduction of AI technologies into the user's activities,³ and the fourth group includes contracts for the provision of paid advertising services for promotion on the RD market.⁴

According to the scope of application criterion, it is possible to distinguish between certain types of an organizational agreement that are not defined in the Civil Code of the Russian Federation aimed at coordinating joint activities. In particular, there is an agreement between several copyright holders on the procedure for exercising the exclusive right to AI technology; an agreement on the interaction of the organizer of the creation of AI technologies with performers under contracts for research, development and technological works (hereinafter referred to as the R&D agreement) and a contract; an agreement on interaction between the developer of the terms of reference for the creation of AI technology, the customer and the contractor under the R&D agreement (contractor agreement); an agreement on co-authorship in the joint creation of AI technologies. There is also a confidentiality agreement; a contract on the use of a smart contract (program code) (Dutta, 2020, pp. 61–78; Rühl, 2020, pp. 159–180); an agreement on the procedure for using the electronic form of the contract, electronic document management, electronic signature; an agreement on the procedure for identifying and authenticating subjects of digital interaction; an agreement on the organization of remote digital interaction of subjects; an agreement on the organization of personal data processing by a SaaS provider when remotely using the software for the functioning of the RD using SaaS technology.

III. Conclusion

The analysis of business practices shows that the parties, agreeing on specific terms in the contract, in many cases do not take into account the specifics of the relationship and the relevant legal regulation,

³ Agreement for the provision of services for the implementation of software. Prepared by N.D. Maleeva for the SPS "ConsultantPlus", 2021. SPS "ConsultantPlus". (In Russ.). Available at: <http://www.consultant.ru/> [Accessed 30.03.2022].

⁴ Contract for the provision of advertising services. Prepared by N.D. Maleeva for the SPS "ConsultantPlus", 2021. SPS "ConsultantPlus". (In Russ.). Available at: <http://www.consultant.ru/> [Accessed 30.03.2022].

the specifics of the qualification of contracts, the need to establish the order of organizational interaction of the parties in a particular contract. Several things make it difficult to protect the rights of a bona fide party to such a contract. Among them are substitution of concepts, inconsistency of conditions on the ownership of the exclusive right to the result of intellectual activity, the absence in the contract of conditions on ensuring confidentiality of information, on the procedure for identification and authentication of the parties, on the procedure for the use of electronic signatures and smart contracts.

Entering into certain relations related to AI technologies, it is important to consider the choice of the applicable contractual structure and the right wording of its content, as these are not a simple formality. In the absence of legal regulation of these relations, the realization of the rights of the parties, the proper performance of duties completely depend on the type and content of the contract they concluded. Due to the complexity and diversity of the studied relations, in many cases it is advisable to apply a set of organizational and property contracts.

In conclusion, we can outline the following results of the study.

1. AI and AI technologies are innovative results of intellectual activity that are not reflected in the list of protected intellectual property objects provided for in Article 1225 of the Civil Code of the Russian Federation. Thus, we should consider AI as a complex object of intellectual rights, and classify AI technologies as a “single technology.” The physical carriers of these ideal objects by their nature are computers (for AI) and robotic devices — RDs (for AI technologies).

2. The legal regime of an object makes it possible to understand what legal actions individuals and legal entities can perform therewith. It is not AI technologies as an intellectual activity result per se that exhibit turnover properties, but the exclusive (property) rights to them. Depending on the causa of the contract, in a certain system of contracts that ensure the turnover of exclusive rights to AI technologies, it is necessary to choose a contractual structure corresponding to it (causa) and conclude a specific civil contract (an agreement on the alienation of an exclusive right, a license agreement, an exclusive right pledge agreement, *etc.*).

3. Several factors influence contractual structures mediating the turnover of exclusive rights to AI technologies. First, contracts ensuring the turnover of exclusive rights to AI technologies involve the transfer of confidential information of high economic value to the party (parties). Secondly, in executing and performing contracts that ensure the turnover of exclusive rights to AI technologies, the ownership of certain subjects of law of exclusive rights to the objects, the absence of encumbrances and other restrictions to these rights are of paramount importance. Third, as a rule, the electronic form of the contract, electronic signature, smart contract (program code) are subject to application. Fourth, mixed and non-defined contracts are used in this domain.

4. When building a system of contracts that ensure the turnover of exclusive rights to AI technologies, it is necessary to take into account a number of factors. First, we consider the concept of “contract” as a transaction agreement that generates a corresponding legal relationship. Second, it is necessary to take into account the ownership of exclusive rights to these objects to certain subjects of law, the absence of encumbrances and other restrictions of these rights. Third, the conclusion of contracts ensuring the turnover of exclusive rights to AI technologies, in most cases, takes place remotely. According to the criterion of connection with property, contracts can be divided into property and non-property contracts. In both groups of contracts, it is possible to distinguish their types according to the target criterion. A number of property and non-property contracts can also be classified by scope of application criterion.

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Information about the Authors

Liudmila Yu. Vasilevskaya, Dr. Sci. (Law), Professor, Professor, Department of Civil Law, Kutafin Moscow State Law University (MSAL), Moscow, Russia
9 Sadovaya-Kudrinskaya ulitsa, Moscow 125993, Russia
ORCID: 0000-0002-3768-6945

Ekaterina B. Poduzova, Cand. Sci. (Law), Associate Professor, Department of Civil Law, Kutafin Moscow State Law University (MSAL), Moscow, Russia
9 Sadovaya-Kudrinskaya ulitsa, Moscow 125993, Russia
ekaterinak7785@yandex.ru
ORCID: 0000-0002-1945-4761