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PROBLEMS OF LEGAL PROTECTION OF OBJECTS CREATED BY ARTIFICIAL INTELLIGENCE

ПРОБЛЕМИ ПРАВОВОГО ЗАХИСТУ ОБ'ЄКТІВ, СТВОРЕНИХ ШТУЧНИМ ІНТЕЛЕКТОМ

For the development of the national economy, an effective system of legal support of relations is formed, which is formed as a result of transformation of intellectual activity results into innovative products and innovations, introduction of intellectual property rights into economic turnover.

Given the expansion and complexity of ways to commercialize intellectual property rights in connection with the acquisition of these rights of various qualities, it is important to study not only the statutory agreements on the disposal of intellectual property rights, but also to develop other legal forms that mediate acts of transfer objects of intellectual property in the field of management.

The purpose of the article is to refine the scientific and theoretical provisions on the legal forms of transfer of intellectual property rights in the field of management. The ways of involving intellectual property rights in the economic turnover within the framework of corporate, contractual, mortgage legal relations are revealed. It is established that the specificity of these relations leaves its mark on the legal forms of transfer of intellectual property rights. It has been found that with the complication of economic relations, the spheres and ways of involving intellectual property rights in economic turnover are expanding. Thus specificity of mechanisms of realization of the specified ways of transfer of the rights causes necessity of working out of the legal form adequate to this specificity.

It is proved that economic and legal regulation of transfer of intellectual property rights does not provide proper definition and differentiation of legal forms of transfer of intellectual property rights in the organization and implementation of economic activities, which should take into account the broad economic potential of these rights. The study substantiates the types of legal forms of transfer of intellectual property rights in the field of management in the case of these rights as: contribution to the formation of the authorized capital of the business organization, contribution to joint activities (simple partnership); use as a subject of pledge and subsequent alienation of the pledged property right as a result of foreclosure on it. On this basis, a conclusion was made about the expediency of improving the economic and legal regulation of relations in the field of transfer of intellectual property rights in terms of normative definition of types of legal forms of transfer of these rights.

Key words: *intellectual property rights, object of intellectual property, organizational and legal form, contract, transfer of rights, economic turnover, artificial intelligence.*

Для розвитку національної економіки необхідна ефективна система правового забезпечення відносин, яка формується в результаті трансформації результатів інтелектуальної діяльності в інноваційні продукти та інновації, впровадження прав інтелектуальної власності в господарський обіг.

З огляду на розширення та складність шляхів комерціалізації прав інтелектуальної власності у зв'язку з набуттям цими правами різної якості, важливим є не лише вивчення статутних договорів про розпорядження правами інтелектуальної власності, а й розробка інших правових форм, зокрема й посередницьких актів, передачі об'єктів інтелектуальної власності у сферу господарювання.

Метою статті є уточнення науково-теоретичних положень щодо правових форм передачі прав інтелектуальної власності у сфері господарювання щодо об'єктів, створених штучним інтелектом. Розкрито шляхи залучення прав інтелектуальної власності до господарського обігу в рамках корпоративних, договірних, іпотечних правовідносин. Встановлено, що специфіка цих відносин накладає свій відбиток на правові форми передачі прав інтелектуальної власності. Встановлено, що з ускладненням економічних відносин розширюються сфери та способи залучення прав інтелектуальної власності до господарського обігу. При цьому специфіка механізмів реалізації зазначених способів передачі прав зумовлює необхідність розробки адекватної правової форми.

Доведено, що економіко-правове регулювання передачі прав інтелектуальної власності не забезпечує належного визначення та диференціації правових форм передачі прав інтелектуальної власності під час організації та

здійснення господарської діяльності, яка повинна відбуватись з урахуванням широкого економічного потенціалу цих прав. У дослідженні обґрунтовано види правових форм передачі прав інтелектуальної власності у сфері господарювання у разі таких прав, як: внесок у формування статутного капіталу господарської організації, внесок у спільну діяльність (просте товариство); використання як предмета застави та подальше відчуження заставленого майнового права внаслідок звернення на нього стягнення. На підставі цього зроблено висновок про доцільність удосконалення господарсько-правового регулювання відносин у сфері передачі прав інтелектуальної власності в частині нормативного визначення видів правових форм передачі цих прав.

Ключові слова: *майнові права інтелектуальної власності, об'єкт інтелектуальної власності, організаційно-правова форма, контракт, передача прав, господарський обіг, штучний інтелект.*

Today there is a rapid development of artificial intelligence technologies, the introduction of robotic systems in everyday life. Almost every country in the world determines the development of artificial intelligence as one of the main directions of its activity, adopts plans and strategies for steps in this direction. The first such strategy was developed in March 2017 in Canada under the name "Pan-Canadian AI Strategy", which involved investing 125 million Canadian dollars in this area, supporting researchers, creating three key centers of development and development of artificial intelligence [1].

On February 11, 2019, the White House issued an Executive Order to Accelerate America's Leadership in Artificial Intelligence, which defined US policy on the development of artificial intelligence in the following five steps: investing in research and development; expanding access to federal data and computing resources for researchers; setting management standards to increase security and public confidence; training programs for the development of new technologies; international cooperation and at the same time protection of national interests [2].

In addition, on January 13, 2020, the US government published draft rules to regulate artificial intelligence in the US, which deals with the regulation of artificial intelligence in private law and encourages the growth of innovation in the field of artificial intelligence. Regulation of private relations under this project should be based on the principles of public trust (confidence in the reliability of artificial intelligence), involving citizens in improving the rules, 34 scientific integrity, risk assessment and management, fairness and non-discrimination, security, interagency coordination [3]. As for Europe, on April 25, 2018, the Commission developed a strategy that, similar to the American strategy, focuses on supporting the development of artificial intelligence, learning and security [4].

The Commission also established a high-level expert group that developed the Guidelines for Reliable Artificial Intelligence, which were published by the Commission on 9 April 2019, among these principles: human supervision; technical reliability and safety; confidentiality and data management; transparency; diversity, non-discrimination and justice; social and environmental well-being; accountability [5]. The EU's ultimate strategy was published on 19 February 2020 under the title White Paper. Among the main areas of activity are similar steps to the American strategy, in addition, emphasizes the need to develop an industry such as data processing, as the latter are the basis for the training of artificial intelligence. Emphasis is also placed on the need to develop ethical and legal standards for the development and operation of these systems, which would protect human rights from violations, in particular, such regulation should be targeted and justified given the risks, possible material or non-material allowed [6].

With regard to Ukraine, the order of the Cabinet of Ministers of Ukraine of January 17, 2018 № 67-r approved the Concept of Development of Digital Economy and Society of Ukraine for 2018–2020, which aims to implement and produce digital technologies; transformation of the economy from traditional to efficient digital; identifies priority steps to implement appropriate incentives and create conditions for digitalization in the real sector of the economy, society, education, medicine, environment, etc.; aimed at understanding the existing challenges and tools for digital infrastructure development; provides for the acquisition of digital competencies by citizens, as well as identifies critical areas and projects of digitalization of the country. The integration of digital technologies into production processes is called the development of Industry 4.0 Industry 4.0 – the next stage technologies and concepts

such as the Internet of Things, big data, predictive analytics, cloud and fog computing, machine learning, machine interaction, artificial intelligence, robotics, 3D printing, augmented reality) [7].

All these strategies are purely advisory and declarative, they only pay attention to the direction in which to move for the development of artificial intelligence systems and solve problems that arise, outline the basic principles on which the development and operation of artificial intelligence should be based in order to it served exclusively for the benefit of mankind and did not violate human rights, but they do not determine the legal status of artificial intelligence. However, given the prevalence of artificial intelligence technologies, determining its legal status, determining whether it can be a full-fledged subject of legal relations, or can be considered only as an object is a very important issue.

Empowering artificial intelligence (the ability to own rights) is only a matter of normative enshrinement of such rights to artificial intelligence. But in order for such legal capacity to make sense, artificial intelligence must also have the ability to exercise such rights (capacity). However, the possibility of endowing artificial intelligence with general legal capacity, artificial intelligence can not exercise their rights independently, because it has no will, interests, it is not characterized by purposeful behavior (unless this goal is set by man, but in this case artificial intelligence will be exclusively a tool). In addition, artificial intelligence cannot be endowed with tort.

Therefore, he will not be able to bear responsibility for the damage caused by his creation.

In addition, according to the Law of Ukraine "On Copyright and Related Rights" the author is a natural person who created a work [8], according to the Law of Ukraine "On Protection of Inventions and Utility Models" the inventor is a man, intellectual, whose creative activity created the invention [9]. Even if we reject the criterion that only man can be the author / inventor and allow the recognition of the legal personality of artificial intelligence, the question remains whether the process of artificial intelligence can be called creative work.

We believe not, because, as O.A. Kartshi rightly points out, works are not able to create fundamentally new creative solutions or works following the example of the human mind and intellect. Obtaining original results in the process of machine learning works is either by copying already known human works, or executing a programmed result embedded in the algorithms of the software and hardware complex Artificial Intelligence – artificial intelligence or a new compilation of already known solutions and works embedded in software code or mathematically are compiled by a neural network. In other words, artificial intelligence cannot be creative.

In addition, copyright is characterized by linking the term of copyright with the death of the author: under the Law of Ukraine "On Copyright and Related Rights" they are valid for 70 years after the author's death [8], under the Berne Convention – 50 [58], US law – 70 [9], but artificial death is not typical for artificial intelligence, and therefore the decision on the validity of copyright in the case of recognition of its author will require revision.

A possible option in this case could be the application of similar legal rules governing the term of copyright for anonymous works (in the US also works created for hire): in Ukraine – 70 years [8], and under the Berne Convention – 50 years from the date of publication, in the USA – copyright lasts for 95 years from the year of the first publication of the work, or for 120 years from the year of its creation, whichever ends earlier [9].

Along with this concept, the concept of co-authorship of man and artificial intelligence should be considered. As we have already mentioned, in Ukraine, as in other foreign countries, copyright law and industrial property law allow the creation of a work / invention by the joint work of several people, but such work must be creative, but material support cannot be considered a creative contribution. But, as we have seen, the work of artificial intelligence cannot be considered a creative work, nor can it be recognized as a subject of law, and therefore it cannot be a co-author. Although such a concept would make it possible to secure the realization of all property rights for a human co-author, and for artificial intelligence could be granted the right to be called the author, but it would be nothing more than unjustified fiction and would make no sense without recognition legal personality of artificial intelligence in general.

Article 7 of the Law of Ukraine "On Inventions and Utility Models" states that an invention

meets the conditions of patentability (criterion of protectionability), if it is new, has an inventive step and is industrially applicable. According to the same rule: – an invention is considered new if it is not part of the prior art (the prior art includes all information that became publicly available in the world before the date of application to the Institution or, if priority, before the date of its priority) (objects , which is part of the prior art, to determine the novelty of the invention should be considered only separately); – the invention has an inventive step, if for a specialist it is not obvious, ie does not follow clearly from the prior art; – the invention is considered industrially applicable if it can be used in industry or in another field of activity.

The object of the invention, which is granted legal protection under the Law "On protection of rights to inventions and utility models" is a product (device, substance, strain of microorganism, cell culture of plants and animals, etc.); process (method), as well as a new application of a known product or process. Legal protection under the same Law does not apply to such objects of technology as plant varieties and animal breeds; basically biological processes of reproduction of plants and animals that do not belong to non-biological and microbiological processes; topography of integrated circuits; results of artistic design (Article 6 of the Law "On protection of rights to inventions and utility models").

Similar criteria are characteristic of the continental legal system in general (Articles 52–56 of the European Patent Convention). In the United States, the patentability of objects is determined as follows: in order to be eligible for a patent, an object must meet two conditions: 1) it must be within one of the eligible objects – process, machine, production or composition of the substance; 2) must be new, useful and non-obvious (35 U.S. Code § 101-103).

The requirement of novelty is aimed at banning the patenting of technologies already available to society.

As for the objects of copyright, the Ukrainian legislation does not explicitly provide for protection requirements for them. But given the norm of Part 3 of Art. 8 of the Law of Ukraine "On Copyright and Related Rights" according to which legal protection applies only to the form of expression of the work and does not apply to any ideas, theories, principles, methods, procedures, processes, systems, methods, concepts, discoveries, even if they are expressed, described, explained, illustrated in the work – it is possible to conclude that there is an objective (material) embodiment of the objects of intellectual property rights so that they can be protected by copyright.

In addition, according to Art. 2 of the Berne Convention, the law of a Member State retains the right to prescribe that literary and artistic works or any of their certain types are not subject to protection unless they are enshrined in one form or another. The list of possible objects of intellectual property rights is not exhaustive.

With regard to the requirements for protection of potential objects of intellectual property rights, the US Code contains the following provision: copyright protection is provided for original copyrighted works recorded in any material medium of expression, known now or later, from which they may be perceived, reproduced or otherwise transmitted, directly or by means of a machine or device (17 U.S. Code § 102). As we can see, American law, in addition to material expression, requires originality. This requirement is not provided by Ukrainian legislation.

The requirement of originality in European legislation applies only to certain objects of copyright: computer programs and databases. In Part 3 of Art. 1 of Directive 91/250/EEC states that a computer program will be protected if it is original in the sense that it is an intellectual creation of the author, and other criteria under this article cannot be established.

Problematic in this aspect is rather the criterion of "creative contribution" or originality. National legislation does not define this criterion. In the decision of Alfred Bell & Co. v. Catalda Fine Arts, Inc. the court notes that a work is original if it is not copied from another work of a similar nature.

In addition, it should be noted that in order for a certain object to become a protected intellectual property right does not require its prior verification of originality or verification of the author's creative activity, as the law establishes the presumption of authorship and in the absence of evidence, indicated as the author on the original or copy of the work (Part 1 of Article 11 of the Law of Ukraine "On Copyright and Related Rights").

The most acceptable concept for determining the authorship of works created by artificial

intelligence, which deserves to be implemented, is the anthropological concept, which is closest to the continental legal system, and the most rational given the nature of intellectual property rights and the nature of artificial intelligence. on the orientation of intellectual property rights to protect the interests of the author and society at the same time. Criteria for protection, which are directly or indirectly established by law on the possibility of certain objects to be protected by intellectual property rights, as evidenced by the interpretation of the law, are aimed at assessing the object, not the processes of creating such an object (the activities of the subject). The author of the work created by artificial intelligence should be considered a user who has made every effort to create it, set the parameters of "activity" of artificial intelligence.

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