PROBLEMS OF LEGAL REGULATION OF ARTIFICIAL INTELLIGENCE IN CIVIL LAW RELATIONS

Abstract. In the article, contemporary issues and challenges arising from the integration of artificial intelligence (AI) into the modern legal framework are examined. The focus is on analyzing the legal status of AI, its role as an object of civil legal relations, and the possibility of holding physical and legal persons responsible for AI's actions. Theoretical and practical aspects of defining AI in intellectual property relations, particularly in the context of copyright, are discussed. The aim of this article is to analyze the main problems of legal regulation of AI in civil law relations and to identify directions for their resolution. The methodological basis of the research is a comprehensive approach that includes the analysis of regulatory legal acts, scientific publications, and the comparative-legal method. Scientific literature and conclusions of scholars regarding the legal status of AI have been analyzed. Based on these conclusions and the analysis of current Ukrainian legislation, it is concluded that artificial intelligence is a product of human intelligence and thus, a product of human activity. Consequently, all advanced technologies are not subjects but rather objects. Arguments are presented that there are no legal grounds to grant such objects legal capacity or legal responsibility; therefore, AI should be defined as a specific object of civil law. The necessity of developing special regulatory legal acts and standards for the regulation of AI use, in order to protect the rights and interests of all stakeholders, is substantiated. The article also highlights international approaches to AI regulation and offers recommendations for improving Ukrainian legislation to ensure legal certainty and protect the rights of all participants in legal relations related to the use of AI.
ПОБЛЕМІ ПРАВОВОГО РЕГУЛЮВАННЯ ШТУЧНОГО ІНТЕЛЕКТУ У ЦИВІЛЬНО-ПРАВОВИХ ВІДНОСИНАХ

Анотація. У статті досліджуються актуальні питання та виклики, що виникають у процесі інтеграції штучного інтелекту в сучасне правове поле. Основну увагу приділено аналізу правового статусу ШІ, його ролі як об’єкта цивільних правовідносин, а також можливості покладання відповідальності за дії ШІ на фізичних та юридичних осіб. Розглядаються теоретичні та практичні аспекти визначення ШІ у відносинах інтелектуальної власності, зокрема, у контексті авторських прав. Метою даної статті є аналіз основних проблем правового регулювання ШІ у цивільно-правових відносинах та визначення напрямків їх вирішення. Методологічною основою дослідження є комплексний підхід, що включає аналіз нормативно-правових актів, наукових публікацій, а також порівняльно-правовий метод. Проаналізовано наукову літературу та висновки науковців щодо визначення правового статусу ШІ. На підставі вказаних висновків та аналізу чинного українського законодавства зроблено висновок, що ШІ породжений людським інтелектом, а отже, є продуктами людської діяльності, тобто, всі передові технології є не суб’єктами, а лише об’єктами. Наведено аргументи, що немає правових підстав надавати таким об’єктам право- чи дієздатність та покладати на них юридичну відповідальність, тому ШІ у такому випадку варто визначати спеціфічним об’єктом цивільного права. Обґрунтовано необхідність розробки спеціальних нормативно-правових актів і стандартів для регулювання використання ШІ, з метою захисту прав та інтересів усіх зацікавлених сторін. У статті також висвітлюються міжнародні підходи до регулювання ШІ та пропонуються рекомендації для удосконалення українського законодавства, що забезпечить правову визначеність та захист прав усіх учасників правовідносин, пов’язаних із використанням ШІ.

Ключові слова: штучний інтелект, цивільно-правові відносини, об’єкт цивільного права, суб’єкт цивільного права, цивільно-правова відповідальність.
Introduction. Artificial Intelligence (hereinafter referred to as AI) is one of the most revolutionary technologies of our time, actively influencing various spheres of social life, including the economy, medicine, education, the legal system, and more. The use of AI in civil law relations opens up new opportunities but simultaneously raises several legal issues. The relevance of this topic is due to the necessity of adapting the legal system to new technological realities and ensuring effective regulation of relationships arising from the use of AI.

One of the key problems is the legal status of AI, specifically whether it can be considered a subject of law or should be exclusively regarded as an object of law. Currently, AI does not possess legal subjectivity, meaning that all actions performed with AI must be attributed to the entities utilizing this tool. This creates challenges in determining responsibility for actions performed by AI and defining its place within the civil law system.

Thus, the purpose of this article is to analyze the main problems of legal regulation of AI in civil law relations and to identify directions for their resolution. The methodological basis of the study is a comprehensive approach that includes the analysis of normative legal acts, scientific publications, and the comparative legal method.

Researchers define the concept of AI by classifying it into types based on the degree of reproduction of human cognitive functions and the influence of humans on decision-making processes or the execution of certain activities. Consequently, in the scientific literature, one can encounter the terms "Applied Artificial Intelligence," "General Artificial Intelligence," and "Artificial Superintelligence" [1, с. 92].

By the resolution of the Cabinet of Ministers of Ukraine in 2020, the Concept for the Development of Artificial Intelligence in Ukraine was approved. According to this concept, artificial intelligence is defined as "an organized set of information technologies that can perform complex tasks using a system of scientific research methods and information processing algorithms, which are obtained or independently created during operation, as well as create and use their own knowledge bases, decision-making models, algorithms for working with information, and determine ways to achieve set tasks." Additionally, it is stated that the main goal of legal regulation in the field of artificial intelligence is "to ensure the protection of the rights and freedoms of participants in AI-related relations, and the development and use of AI technologies in compliance with ethical standards" [2].

In recent years, there has been active development and implementation of legal norms at the international level to address issues arising around AI. Consequently, the first document that defined the civil law regulation of robotics was the European Parliament Resolution with recommendations for the European Commission dated February 16, 2017 [3].

A significant step was the adoption of the Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on artificial
intelligence (Artificial Intelligence Act) and amending certain Union legislative acts on April 21, 2021 [4].

The provisions of the mentioned document address issues of confidentiality and liability in the form of fines. At the same time, significant attention is paid to copyright, and in paragraph "ad" it is stated that the responsibility for the actions of artificial intelligence lies with the "agent," who can be the creator, owner, operator, or another subject responsible for the actions of artificial intelligence.

In March 2024, the United Nations General Assembly unanimously adopted the first global resolution on artificial intelligence, calling on countries to protect human rights, safeguard personal data, and monitor AI for risks [5].

On May 21, 2024, the Council of Europe adopted the first Artificial Intelligence Law. The new law aims to promote the development and use of safe and reliable AI systems in the EU single market by both private and public entities. At the same time, it seeks to ensure the protection of fundamental rights of EU citizens and stimulate investment and innovation in the field of artificial intelligence in Europe. The AI Act applies only within the scope of EU legislation and provides exceptions, for example, for systems used exclusively for military and defense purposes, as well as for research purposes [6].

In our opinion, the above provisions indicate that artificial intelligence is defined as the result of human intellectual activity aimed at creating systems capable of imitating cognitive functions such as learning, reasoning, perception, and decision-making. The development of AI involves combining knowledge from various fields of science, including computer science, mathematics, neurobiology, psychology, and other disciplines.

Scientists, engineers, and programmers develop algorithms and models that enable machines to analyze large volumes of data, identify patterns, and adapt to new conditions. The process of creating AI involves not only programming but also research and the development of new methods of information processing, based on human intelligence and the ability to innovate.

Discussions about the legal status of artificial intelligence intensified when the provisions of the European Parliament Resolution 2015/2103(INL) specified a particular legal status for intelligent robots, allowing them to be endowed with a special legal status as an "electronic person" [7].

Significant attention to the research of issues related to artificial intelligence is paid by Karmaz O. O. and Kusherets D. V. Supporting the opinion of M. Stefanchuk, these scholars note that robots with certain characteristics can be defined by the concept of an "electronic person," who will be capable of being bearers of rights and obligations. At the same time, the observation regarding the problems of establishing liability in the sphere of action of artificial intelligence or the "electronic person" is pertinent [8, c. 249].
In scientific literature, the main distinction of artificial intelligence is that over time it will be able to become aware of and control its actions. This differentiates it from a computer program or a program associated with a specific mechanism. Thus, some scholars conclude that artificial intelligence can become a legal, capable, and delictable person, able to make decisions about itself, its existence, and, under conditions of uncertainty, accumulate knowledge from its own experience and the experience of others, both similar to itself and human beings [9, c.144].

In contrast to these assertions, N.M. Stefanyshyn and T.Ya. Skhab-Buchynska argue that artificial intelligence should be considered an object of civil legal relations, to which such relations pertain, meaning AI is an object of civil rights. It can be viewed as a thing that can be disposed of or as an object of intellectual property rights, created as a result of human intellectual activity [10, c. 130].

According to the provisions of the Civil Code of Ukraine, the subjects of civil legal relations include natural persons, legal entities, the state of Ukraine, the Autonomous Republic of Crimea, territorial communities, foreign states, and other subjects of public law. The state as a subject of civil relations is defined as the bodies of state authority [11]. It is noteworthy that AI does not possess any characteristic features inherent to a subject of civil legal relations.

The use of AI can lead to both material and immaterial harm. The problem lies in identifying the subject responsible for such actions. Liability may be imposed on the AI manufacturer, user, or software developer. The lack of clear regulations governing these issues complicates the dispute resolution process.

Indeed, civil liability for harm caused by artificial intelligence is a complex and multifaceted issue that requires the development of specific legal norms and mechanisms. Modern legal systems do not have clearly defined rules regulating liability for AI actions since such systems are considered merely tools created and controlled by humans. In our opinion, responsibility for their actions falls on the natural or legal persons who create, implement, or operate these technologies.

Another unresolved issue is the protection of personal data. AI often uses large amounts of personal data for training and functioning. This poses risks to privacy and personal data protection rights. Existing legislation does not always account for the specifics of AI usage, necessitating the improvement of legal mechanisms for personal data protection in this context.

AI can create intellectual property objects such as music, paintings, literary works, etc. This raises questions about the legal status of such objects and who should hold the rights to them—the AI developer, user, or the AI itself. Currently, there is no clear answer to this question, which creates additional legal uncertainty.

According to the Law of Ukraine "On Copyright and Related Rights," the subjects defined are "author," "performer," "producer," "webpage owner," and "lawful user," all of which are natural or legal persons. Thus, Ukrainian legislation does not identify AI as a holder of intellectual property rights. At first glance,
authorship could be attributed to the person who requested the AI to create an object. However, this person does not perform any intellectual or creative actions that would result in the creation of such an object. Therefore, in our opinion, the new practice of using AI challenges traditional approaches to creativity, authorship, and intellectual property rights, expanding the boundaries of copyright law.

To effectively regulate relationships involving the use of AI, special legislation must be developed that considers all aspects of AI functioning in civil legal relations. Subordinate regulatory acts are insufficient to govern such a vast area. A special law is needed to define the legal status of AI, establish rules for liability for harm caused by AI, and mechanisms for personal data protection.

Considering international acts, amendments should also be made to existing normative legal acts, primarily the Civil Code of Ukraine, to adapt their provisions to new technological realities. We believe that artificial intelligence is a product of human intelligence and thus a product of human activity. Hence, all advanced technologies are not subjects but merely objects. In our opinion, there are no legal grounds to grant them legal capacity or impose legal responsibility on them. In this case, AI should be defined as a specific object of civil law.

At the same time, an important aspect is the development of ethical standards for the use of AI to ensure the protection of human rights and prevent abuses in this sphere. Ethical standards in the field of AI application are more relevant compared to other areas because they encompass all aspects of social life.

The Recommendation on the Ethics of Artificial Intelligence was adopted at the UNESCO General Conference in November 2021. This recommendation establishes a set of values that ensure the protection of human rights and human dignity. Its primary goal was to implement tools and create regional roundtables for mutual learning and partner development networks worldwide, such as the Network of Experts on Ethical Artificial Intelligence Without Borders and the Women 4 Ethical AI network [13].

Measures to implement ethical norms in countries where AI is used are ongoing. Therefore, to address the ethical issues of AI usage, collective efforts from scientists, legal professionals, and managers are required at both international and national levels.

**Conclusion.** The concept of AI is broad and grounded in various scientific fields. Its use in civil-law relations creates new opportunities but also gives rise to a series of legal issues that require immediate resolution. To effectively regulate this sphere, it is necessary to develop special legislation, amend existing regulatory acts, and establish ethical standards. This will ensure legal clarity and protect the rights of all participants in legal relations related to AI.

Thus, AI is the result of collective human intellectual work aimed at creating technologies capable of performing complex tasks and supporting decision-making in various spheres of life. This development opens up new opportunities for
improving efficiency and productivity across many industries, while simultaneously requiring careful consideration of its ethical and legal aspects.

References:
2. Approval of the Concept of Artificial Intelligence Development in Ukraine: Resolution of the Cabinet of Ministers of Ukraine dated December 2, 2020 No. 1556-r. URL: [https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text](https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text)
5. Draft Framework Convention on artificial intelligence, human rights, democracy and the rule of law. 2024. URL: [https://rm.coe.int/090001680aee411](https://rm.coe.int/090001680aee411)

Література:
2. Approval of the Concept of Artificial Intelligence Development in Ukraine: Resolution of the Cabinet of Ministers of Ukraine dated December 2, 2020 No. 1556-r. URL: [https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text](https://zakon.rada.gov.ua/laws/show/1556-2020-%D1%80#Text)

5. Draft Framework Convention on artificial intelligence, human rights, democracy and the rule of law. 2024. URL: [https://rm.coe.int/0900001680aee411](https://rm.coe.int/0900001680aee411)


