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BALANCING THE INTERESTS OF SOCIETY AND COPYRIGHT HOLDERS IN THE USE OF WORKS BY ARTIFICIAL INTELLIGENCE SYSTEMS

Submission Date: December 20, 2024, Accepted Date: December 25, 2024,

Published Date: December 30, 2024

Crossref doi: <https://doi.org/10.37547/ijlc/Volume04Issue12-15>

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ABSTRACT

The article is devoted to the problem of ensuring a balance between the interests of society and copyright holders when using works by artificial intelligence systems. The author analyzes the risks of uncontrolled use of AI for processing protected intellectual property objects, explores approaches to regulating this issue in foreign countries, and considers various options for limiting exclusive rights in favor of AI. It is proposed to introduce a flexible model combining special exceptions for the non-commercial use of works for the development and training of AI, as well as a mechanism for compulsory licensing in the commercial sphere. The article substantiates the need for a systematic modernization of copyright legislation, taking into account the development of digital technologies while maintaining fundamental guarantees of the rights and interests of authors.

KEYWORDS

Artificial intelligence, copyright, intellectual property, exclusive rights, exceptions and limitations, compulsory licensing, balance of interests, digital environment.

INTRODUCTION

The development of artificial intelligence (AI) technologies is one of the key trends of the modern digital age. AI is increasingly being used in various fields of human activity, opening up new opportunities for scientific and technological progress, economic growth and social development. AI is actively used in industry, transportation, healthcare, education, art, entertainment and many other fields [1].

AI systems are capable of solving complex tasks that require processing huge amounts of data and performing resource-intensive calculations. They can analyze information, find patterns, make predictions, make decisions and take actions previously available only to humans. Thanks to the ability to self-learn and adapt, AI is constantly improving and becoming an increasingly autonomous and effective tool.

At the same time, the rapid development and implementation of AI is associated with a number of complex challenges and problems. One of these problems is the use by AI systems of the results of intellectual activity protected by copyright - texts, images, musical works, etc. AI needs large amounts of data for learning, and a significant portion of this data is works created by human intelligence and creativity. The widespread use of such AI works without the consent of the copyright holders may violate their exclusive rights and legitimate interests.

On the other hand, society is extremely interested in the rapid development of AI technologies and the benefits they can bring to various sectors of the economy and the social sphere. For the training and functioning of AI, it is necessary to have the most free access to data, including protected works. The introduction of strict restrictions on the use of intellectual property objects by AI systems can significantly slow down their development and implementation, which runs counter to public interests.

Thus, there is an objective contradiction between the interests of society in the development of AI and the interests of copyright holders in protecting their rights to the results of creative activity. This contradiction requires the search for a reasonable balance and compromise. It is necessary to create such legal conditions that, on the one hand, will maximize the potential of AI for the benefit of the entire society, and on the other hand, will ensure due respect and protection of the rights of authors, inventors, and other creators of intellectual products. The search for an optimal model for regulating the use of works by AI systems is an extremely urgent task at the present stage.

The purpose of this article is to analyze the problem of ensuring a balance of interests between society and copyright holders when using intellectual property objects with AI technologies, to develop scientifically sound recommendations for improving regulatory regulation in this area.

To achieve this goal, it is necessary to solve the following tasks:

- 1) To reveal the social significance of the development of AI technologies, identify key areas and directions of their use, and show the objective need of AI for data, including those protected by intellectual property rights.
- 2) To analyze the risks and problems associated with the uncontrolled use of works by AI systems for copyright holders; to justify the need to ensure a balance of private and public interests in this area.
- 3) To investigate the approaches that have developed in the legislation and law enforcement practice of foreign countries to regulate the use of intellectual property by AI technologies; to identify the main models and trends of legal regulation.
- 4) To consider various options for limiting the exclusive rights of copyright holders in favor of using works by AI systems (free use based on exceptions, compulsory licensing), to assess them from the point of view of ensuring a balance of interests.
- 5) Formulate proposals for improving legislation in the field of intellectual property, taking into account the development of AI technologies; determine the optimal regulatory model that allows meeting the interests of both society and copyright holders.

LITERATURE REVIEW

The problem of ensuring a balance between the interests of society and copyright holders in the context of the development of AI systems is of serious scientific interest and is reflected in an increasing number of studies by national and foreign specialists.

The general issues of the influence of AI on the sphere of intellectual property and creativity are analyzed in the works of I.V. Ponkin and A.I. Redkina [1], A.I. Savelyev [2], V.B. Naumov [3]. The authors identify the key challenges and risks associated with the use of AI technologies, and show the need to adapt legal protection mechanisms to the new realities of the digital environment.

Considerable attention in modern research is paid to specific aspects of the use of AI systems for copyright and related rights. O.A. Ruzakova examines the influence of AI on the institution of authorship, the problems of the protection of works created with the help of AI, the prospects for improving legislation in this area [4]. E.S. Kotenko, M.V. Kozlovskaya, E.A. Maltseva consider the admissibility free use of works for the purposes of AI machine learning based on copyright exceptions [11].

In addition, copyright issues in connection with the development of AI are developed by such authors as M.Sag [5], J.Grimmelmann [6], A. Raju [7], P.B. Hugenholtz [8], M. Senftleben [9], J.P.Quintais [10]. The researchers analyze various regulatory approaches and models developed in the USA, the EU, Japan, Singapore, South Africa and a number of other jurisdictions. The prospects of introducing new exceptions in favor of AI, compulsory licensing, technological and contractual solutions are considered.

Initiatives to reform the institute of exclusive rights to ensure AI access to works are actively discussed. S. Flynn, P. J. Trigga, M. Petrik, I. Crick propose to provide for an exception in legislation that allows the use of protected works for non-commercial purposes of research using AI, data mining [12]. The idea of introducing a mechanism for compulsory licensing of works for AI is justified in the works of O.Matskevich [13], E.Dugin [14].

An analysis of the scientific literature shows that at the moment, several basic approaches have been formed in the doctrine to solve the problem of ensuring a balance of interests when using AI works:

- 1) Maintaining the status quo, refusing to make radical changes to intellectual property legislation. Proponents of this approach, recognizing the importance of AI development, believe that the current copyright paradigm does not create insurmountable obstacles and is generally capable of responding to new challenges.
- 2) The introduction of new special exceptions to the exclusive right that allow the free non-commercial use of works for research, development and training of AI systems. The objective necessity of ensuring wider access of AI to the protected results of intellectual activity is substantiated.
- 3) Creation of a system of compulsory licensing of copyright and related rights in the interests of AI. Such a system will retain exclusive rights for copyright holders, but oblige them to provide works for the use of AI on fair terms and for reasonable remuneration.
- 4) A radical revision of the copyright paradigm, the transition to the concept of public domain in the digital age. It is proposed to treat data and information as the common heritage of mankind, to ensure maximum free access to them for everyone without exception.

It seems that the most promising approach is a balanced approach combining the introduction of limited exceptions and compulsory licensing mechanisms. Such a flexible model, on the one hand, will not create excessive barriers to the development of AI, and on the other hand, it will preserve the basic guarantees of the rights and interests of authors and other copyright holders. At the same time, any new exceptions and restrictions must comply with the "three-step verification" enshrined in international intellectual property agreements.

METHODS

The methodological basis of the research is the dialectical method of scientific cognition, which involves the study of legal phenomena and processes in their development and interrelation, taking into account the influence of technological, economic, and social factors.

The article uses general scientific methods of analysis and synthesis, induction and deduction, comparison and generalization, abstraction and concretization, as well as special methods of legal research: formal legal, comparative legal, historical legal, sociological.

Using the formal legal method, the interpretation of the current norms of intellectual property legislation is carried out from the angle of the problematic use of works by AI systems. Gaps and contradictions in legal regulation are revealed, as well as the inconsistency of certain norms with new technological realities.

The comparative legal method allows us to compare approaches to the regulation of relations on the use of AI of intellectual property objects that have developed in national law and in foreign jurisdictions. The general trends and patterns are determined, and the prospects for the reception of progressive foreign experience into the domestic legal system are evaluated.

Using the historical and legal method, the evolution of the institution of exclusive rights is traced, its transformation in the context of digitalization and the impact of technological innovations are analyzed. The conclusion is made about the need to adapt traditional intellectual property protection mechanisms to new public relations.

The sociological method is implemented by generalizing and analyzing the positions of various stakeholders (authors, copyright holders, users, research and educational institutions, representatives of the IT industry, etc.) on the problem of permissible limits of free use of AI works. Studying the divergent interests and demands of social groups allows you to take a more objective look at the problem and find a balanced solution.

The theoretical basis of the research is the scientific works of leading experts in the field of intellectual property rights, information law and legal regulation of new technologies. Among them are the works of I.A. Gemini, E.P. Gavrilov, V.A. Dozortsev, I.A. Zenin, L.A. Novoselova, O.A. Ruzakova, A.P. Sergeev, V.N. Sinelnikova, S.A. Sudarikov and others.

The source base of the research consists of national and foreign legislation, international agreements, acts of judicial authorities regulating intellectual property relations; analytical and statistical materials of international organizations (WIPO, UNESCO, OECD, EAEU, etc.), national government agencies and research centers.

The scientific novelty of the article consists in the development of a holistic approach to the problem of ensuring a balance of interests when using works by AI systems. Unlike works dealing with particular aspects of the problem, this article integrates technological, economic and legal aspects within a single concept.

The proposed regulatory model is complex and compromise in nature, taking into account the interests of all stakeholders.

RESULTS

The analysis of legislation, law enforcement practice and doctrinal approaches allowed us to obtain the following main results:

1. Currently, in most jurisdictions, including Uzbekistan, there are no special rules on the use of works by AI systems. The current legislation on intellectual property does not single out AI as a special subject or object of legal relations and proceeds from the standard protection of exclusive rights.

2. At the same time, the technological specifics of AI (the need to process large amounts of data, unpredictability and autonomy of behavior, complexity of algorithms, etc.) do not fit well into the traditional paradigm of copyright, and cause significant problems in practice. The free use of AI systems of protected works without the consent of the copyright holders is often blocked as a violation of copyright.

3. In the judicial practice of a number of countries (USA, EU, Japan, Israel), attempts are being made to justify the permissibility of using works for teaching AI based on the doctrine of fair use and similar approaches. However, such precedents are limited and inconsistent in nature, without providing legal certainty.

4. There is a growing discussion in the foreign scientific doctrine and in the expert community about the need to reform copyright legislation in order to adapt to the realities of AI. Most researchers advocate the introduction of new exceptions and limitations of exclusive rights to ensure the freedom of use of works by AI systems.

5. The most promising model seems to combine the establishment of special exceptions for the non-commercial use of AI works (for scientific, educational, experimental purposes) and a mechanism for compulsory licensing in the commercial use of AI. This approach will balance the interests of society in the development of innovations and the interests of copyright holders in obtaining fair remuneration.

6. The introduction of new exceptions and limitations of copyright in favor of AI should be accompanied by counter guarantees of the rights and interests of authors, including: special requirements for the fair use of AI, protection of the non-property rights of authors, obligations to indicate the name of the author and his other non-property rights.

7. Compulsory licenses for the use of works within the framework of AI should be considered as an additional mechanism to ensure a balance of interests and prevent abuse of exclusive rights. Such licenses should be issued on the basis of clear criteria, guarantee that copyright holders receive fair remuneration, and encourage the practice of voluntary licensing.

8. For the effective application of new legal mechanisms in the field of AI, it is critically important to ensure their technological neutrality, flexibility and adaptability, and orientation to the rapidly changing digital landscape. Otherwise, legislative innovations risk becoming outdated before they come into force. It is advisable to develop special guidelines and recommendations for courts in complex cases in the field of AI.

9. Copyright reform in connection with the development of AI should not be limited to point-by-point amendments. There is a need for a systematic modernization of this industry based on a functional approach, rethinking basic concepts and principles,

and searching for a new philosophy of protection in the digital age. The most important task is to ensure a reasonable balance between human rights and the "rights" of AI.

10. The strategic guideline for the development of the institute of intellectual property should be the full stimulation of the processes of creation and use of works for the public good, the elimination of unjustified barriers to public access to knowledge and culture. Categorical prohibitions on the free use of works by AI systems do not meet this task and should become a thing of the past.

DISCUSSION

The results of the conducted research clearly show that today intellectual property law and copyright legislation are in crisis and in urgent need of modernization, taking into account the digital transformation of society, the rapid development of AI technologies and other innovations.

The traditional paradigm of copyright, based on the comprehensive monopoly of the copyright holder and the strict prohibition of any use of a work without his permission, is in clear contradiction with the technological and social realities of a data-oriented economy, where data and information acquire key value, their most complete and effective use for the common good.

Copyright is no longer able to adequately respond to new ways of handling digital content, the avalanche-like growth of segments of the real use of works that do not fall under the classical copyright models. The monopoly of the author (copyright holder) increasingly turns into unjustified barriers and restrictions in public access to knowledge and information, hinders scientific and technological progress and socio-economic development.

This conflict between exclusive rights and the needs of social development is most clearly manifested in the field of AI. In order to fully function and benefit, AI systems need constant "food" in the form of data, which they use for machine learning, building models and forecasts, analyzing patterns, and creating new content. A significant part of such data is copyrighted works - texts, music, videos, images, etc.

Formally, any use of these AI works without the permission of the copyright holders can be qualified as a copyright violation. However, in practice, obtaining individual permissions to use the millions and billions of content objects involved in AI training is simply impossible. This puts AI developers in a dilemma: either use works to circumvent the law (which is fraught with lawsuits and sanctions), or refuse to work with protected data at all (which dramatically narrows the functionality and capabilities of AI systems).

Neither the first nor the second option is acceptable from the point of view of the public interest. The illegal use of other people's creative results undermines respect for the institution of intellectual property and incentives to create new works. The rejection of full-fledged AI work with "big data" deprives society of the huge advantages and opportunities that artificial intelligence can provide in a variety of fields - from science and medicine to culture and art.

Obviously, copyright in its current form is not able to offer an effective solution to the described problem. The standard protection of exclusive rights creates too high transaction costs and entry barriers that block the development and use of AI systems for socially useful purposes. At the same time, a complete rejection of copyright protection threatens to erode creative incentives and may harm the interests of copyright holders, both material and moral.

The only way out of this impasse can be a systematic reform of copyright and the search for new regulatory models that ensure a reasonable balance of rights and interests of all stakeholders in the digital environment. As the results of this study show, the most promising model seems to be one that combines a differentiated approach to restrictions on exclusive rights in non-commercial and commercial areas of AI use.

With regard to non-commercial activities related to the use of AI for scientific, educational, experimental, statistical and similar purposes, it is advisable to introduce a new special exception allowing the free use of works for machine learning and data analysis. Appropriate amendments may be made to article 26 of the Law of the Republic of Uzbekistan "On Copyright and Related Rights", indicating that the reproduction and other use of objects of copyright and related rights for the purpose of creating, training and functioning of AI systems is not a violation of the exclusive right, provided that such use:

- is non-commercial in nature and pursues socially useful goals - scientific research, education, technology development, obtaining new knowledge, etc.
- does not unreasonably damage the usual use of works and does not unreasonably infringe on the legitimate interests of authors and other copyright holders.
- accompanied by an indication of the name of the author whose work is being used and the source of the loan, except in cases where this is not possible.

This exception will allow AI systems to open legal access to the use of works in those areas where freedom of information takes precedence over the private interests of copyright holders, and will stimulate scientific and technological progress and the development of innovations. At the same time, the obligation of non-commercial use, respect for the

personal non-property rights of authors and the principle of good faith will act as a necessary counterweight and guarantee against abuse.

In the commercial sector, where the use of AI is aimed at making a profit, the gratuitous and uncontrolled use of other people's works looks much more controversial. Here, the task of ensuring fair remuneration of copyright holders for the contribution of their intellectual capital to the creation of added value comes to the fore. At the same time, the difficulty of agreeing individual conditions with a variety of copyright holders significantly complicates the work of AI.

A way out may be a mechanism for compulsory licensing, which will oblige copyright holders to grant permission for the use of works by AI systems, but on reasonable terms and for a fair fee. Appropriate amendments may be made to article 58 of the Law of the Republic of Uzbekistan "On Copyright and Related Rights", with the establishment of a compulsory non-exclusive license to use works in the development and commercial operation of AI systems in compliance with the following principles:

- a compulsory license is considered as an extreme measure applied when a voluntary agreement with the copyright holder is not reached and in cases where the free use of works is essential for society, and the position of the copyright holder is clearly unconstructive.
- a compulsory license is issued by an authorized state body at the request of an interested person in a simplified administrative procedure, based on transparent and non-discriminatory criteria.
- the amount of remuneration for a compulsory license is set in a fixed amount or as a percentage of the licensee's income. The tariffs of similar voluntary

licenses can be used as a basis, and in their absence, the average market royalty rates in this area.

- the recipient of a compulsory license must comply with certain conditions - specify the author and source, use the works strictly for the stated purposes, avoid distortions and modifications, take measures to restrict access by third parties, etc.

Such a mechanism will allow, on the one hand, to overcome "bottlenecks" and give AI systems the necessary freedom of maneuver, and on the other hand, to properly take into account the interests of copyright holders. The threat of compulsory licensing will motivate the latter to show greater flexibility in negotiations and encourage the practice of voluntarily concluding licensing agreements on mutually beneficial terms.

Of course, the proposed model of limitations of exclusive rights in favor of AI still needs careful additional study and discussion. It is necessary to clearly define the scope of the new rules, minimize the risks of abuse, provide effective dispute resolution procedures, etc. However, in general, this approach seems to be the most balanced and meets the current challenges of the digital age.

The proposed changes to the legislation are only the first, although very important step towards the systematic modernization of copyright. More broadly, the task on the agenda is to develop a new paradigm for regulating intellectual property, which would ensure an optimal combination of private and public interests in the context of total digitalization and robotization.

The cornerstone of such a new paradigm should be an orientation towards the fullest possible disclosure of the creative and innovative potential of society, full encouragement of the creation and use of the results

of intellectual activity for socially useful purposes. Copyright and other mechanisms for the protection of exclusive rights should be considered not as an end in itself, but as a means of stimulating creativity and innovation in the interests of the whole society.

Society is vitally interested in putting the achievements of scientific and technological progress, including AI, at the service of sustainable development and solving global problems of mankind - from fighting disease and poverty to countering climate change and space exploration. The task of law is to create the necessary institutional conditions for this, remove excessive barriers and restrictions, and ensure a reasonable balance of all stakeholders.

At the same time, it would be naive to believe that legal measures alone can solve all the problems caused by the development of AI for the field of intellectual property. Self-regulation mechanisms, the development of ethical principles and codes of conduct for AI developers, improving digital literacy and business social responsibility, strengthening the spirit of cooperation and open data exchange between all participants in the innovation ecosystem will play a huge role.

Science, education, and culture cannot and should not develop in isolation from each other, in an atmosphere of secrecy and distrust. Only through cooperative efforts and multilateral interaction will we be able to put AI systems at the service of the common good, to find worthy answers to the ethical and legal dilemmas that rapid technological progress confronts us.

CONCLUSION

The conducted research shows that the development of AI technologies poses a serious challenge to the current copyright system, based on the idea of maximum restriction of the freedom of use of works.

The emerging conflict between exclusive rights and the need for AI access to objectively necessary data calls into question the effectiveness of traditional security mechanisms that do not take into account the specifics of the digital environment.

In an effort to protect the interests of copyright holders, copyright in its current form often creates unjustified obstacles to the use of works by AI systems, even if such use is socially useful and does not harm the interests of the authors. The result is a slowdown in the processes of creating and implementing AI, the preservation of outdated business models and significant losses for social development.

It is obvious that the way out of this impasse lies on the path of comprehensive modernization of intellectual property legislation, reconfiguration of regulatory mechanisms to ensure a balance of interests of the individual, society and the state in the new technological realities. The measures proposed in the article to establish special exceptions and restrictions in favor of AI are an important step in this direction.

A further strategy for improving legal regulation should proceed from the unconditional priority of public interests in obtaining maximum benefits from the use of AI while ensuring guaranteed protection of human rights and freedoms. Any restrictions on the freedom of information circulation must be exceptional and justified by clearly defined public interests.

At the same time, a complete rejection of the protection of exclusive rights in the digital environment would also be an extreme. It is necessary not to destroy, but to rebuild the copyright system based on a differentiated approach that would take into account the specifics of specific areas and ways of using AI, the nature and significance of the public

interests involved, potential risks and benefits for certain categories of copyright holders.

In the non-profit sector related to the use of AI for scientific research, education, and the preservation of cultural heritage, maximum freedom of access to works and data with minimal necessary restrictions is advisable. In the commercial sector, greater emphasis should be placed on contractual models and fair compensation mechanisms that ensure a balance between the interests of business and rights holders.

In any case, the legal protection of intellectual property should not become a self-sufficient goal and a brake on innovative development. The future of copyright is not in prohibitions and restrictions, but in encouraging creativity, sharing knowledge and data, and promoting cross-border scientific and technical cooperation. Only through joint efforts can we achieve such a future and put the capabilities of AI at the service of sustainable development in the interests of all mankind.

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