

SUI GENERIS PROTECTION OF AI-GENERATED OUTPUTS IN UKRAINE

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ABSTRACT

The possibility and feasibility of legal protection for objects autonomously generated by AI technologies is a debatable issue. Some countries, notably the United Kingdom, offer copyright protection for such objects, while others do not recognize their copyrightability. There is also an example of the introduction of a special legal regime for autonomous computer creations, namely new sui generis right which came into force in Ukraine on January 1, 2023. This article reveals the main provisions of this regime and its positive features, such as a distinction between AI-generated outputs and human works, non-recognition of the legal subjectivity of AI, and flexible determination of the right holders. At the same time, some aspects of the sui generis right to AI-generated outputs raise concerns, particularly the unclear criteria for the protectability, automatic granting of legal protection without any exceptions, a full range of exclusive rights, and a long duration of their validity. To avoid unjustified overprotection, the article suggests ways to improve the new regime by balancing the right to AI-generated outputs, considering the current state of technology development, and the interests of both potential rights holders and society.

Key words: artificial intelligence, AI-generated outputs, legal protection, copyright, sui generis right, intellectual property.

1. INTRODUCTION

To protect or not to protect the results of computer technologies' autonomous functioning embodied in texts, images, music, and other objects that resemble human works? In recent years, this issue has been actively discussed in many countries, and some of them have already presented their vision of how

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it should be addressed. In the United Kingdom, a computer-generated literary, dramatic, musical, or artistic work is protected by copyright. The author of such work is the person by whom the arrangements necessary for the creation of the work are undertaken. Computer-generated works are protected in the same way as works created by people, and the term of their protection is 50 years after the author's death.¹ In contrast, in the United States, copyright does not cover autonomous computer creations. According to the requirements of the U.S. Copyright Office, registration is only possible for "an original work of authorship, provided that the work was created by a human being. The copyright law only protects 'the fruits of intellectual labor' that 'are founded in the creative powers of the mind'. Because copyright law is limited to 'original intellectual conceptions of the author', the Office will refuse to register a claim if it determines that a human being did not create the work."² In the recent case of the comic book "Zarya of the Dawn", the U.S. Copyright Office recognized limited protection for this work only in terms of the texts and the selection, coordination, and arrangement of the work's written and visual elements that were the result of human creativity, and did not recognize copyright in the drawings that were generated by AI.³

However, in most jurisdictions, there is still no clear determination of the legal status of AI-generated outputs that have the same form of expression as human-made works but do not express a person's creative choice and are formed without their direct participation. The protection of autonomous computer creations remains a debatable issue in terms of whether they should belong to the public domain,⁴ whether it is advisable to protect them with copyright⁵ or relat-

¹ Copyright, Designs and Patents Act of the United Kingdom, 1988, Art. 12(7).

² United States Copyright Office: *Compendium of U.S. Copyright Office Practices § 101*, 3d ed., 2021, para 30.

³ On September 2022, the U.S. Copyright Office registered a copyright for the comic book "Zarya of the Dawn" by Kristina Kashtanova. Later, the Office became aware of statements on social media attributed to Ms. Kashtanova that the drawings in the comic book were generated using Midjourney AI. In February 2023, the Office reconsidered its decision to register copyright in this work and recognized limited protection only for those elements of the book that were created by Ms. Kashtanova. See: United States Copyright Office: *Zarya of the Dawn* (Registration # VAu001480196), Washington: The United States Copyright Office, 21.02.2023.

⁴ Schönberger, D.: *Deep Copyright: Up - And Downstream Questions Related to Artificial Intelligence (AI) and Machine Learning (ML)*, SCHÖNBERGER Daniel, *Deep Copyright: Up-and Downstream-Questions Related to Artificial Intelligence (AI) and Machine Learning (ML) in Droit d'auteur*, (4) 2018.

⁵ Denicola, R. C.: *Ex Machina: Copyright Protection for Computer-Generated Works*, *Rutgers University Law Review*, (69) 2016, pp. 286-287; Veiksa, I.: *Protection of computer-generated works in the era of new technologies*, *IAES International Journal of Artificial Intelligence*, 10(1) 2021, p. 241.

ed rights similar to the legal protection of phonograms,⁶ or whether a separate special regime of their protection should be developed.⁷

The advantages of a special regime are that it does not change the paradigm of copyright and related rights. The concept of copyright is based on the fact that the object of legal protection must be made by a human creative effort,⁸ while the autonomous functioning of a computer excludes the creative influence of a human. Related rights, which in many European countries protect performances, phonograms, audiovisual recordings, broadcasts, and some other individually defined objects, do not provide for the indispensable participation of a person in the formation of some of these objects. Both the natural person and the legal entity can be the producer of a phonogram⁹; in some countries, the broadcasting organization is exclusively a legal entity¹⁰. At the same time, related rights do not protect texts or drawings that can be generated by AI, and therefore, many autonomous computer creations do not fit into the related rights system. The development of a special regime avoids conflicts with existing regimes and does not change them, but offers legal protection that is adapted to the needs that go beyond the existing regimes. This approach has recently been implemented in Ukraine in the new Law on Copyright and Related Rights¹¹ (Ukrainian Copyright Law), adopted on December 1, 2022, and entered into force on January 1, 2023. Art. 33 of the Law¹² determines the peculiarities of the new *sui generis* right to objects generated by a computer program without direct human participation.

⁶ Senftleben, M., Buijelaar, L.: Robot Creativity: An Incentive-Based Neighboring Rights Approach, *European Intellectual Property Review*, 42(12) 2020, pp. 797-812.

⁷ Feliú, V.: Our Brains Beguil'd: Copyright Protection for AI Created Works, *Intellectual Property and Technology Law Journal*, 25(2) 2021, p. 124.

⁸ Hugenholtz, P. B., Quintais, J. P.: Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?, *IIC - International Review of Intellectual Property and Competition Law*, 52 2021, pp. 1194-1195.

⁹ WIPO: WIPO Performances and Phonograms Treaty, Geneva, 1996, Art. 2(d).

¹⁰ In particular, in Croatia, a broadcasting organization is only a legal entity that takes the initiative and bears editorial responsibility for the preparation, distribution and broadcasting, including live broadcasting, of a program transmitted by means of a program signal. See: Narodne novine: *Zakon o autorskom pravu*, Zagreb: Narodne novine d.d., 111/2021, Art. 156(2).

¹¹ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, No. 2811-IX, 2022.

¹² For a non-official translation of Article 33 see: Shtefan, A.: Non-official translation of Art. 33 of the Law of Ukraine on Copyright and Related Rights - The *sui generis* right to non-original objects generated by a computer program, November 2024.

Sui generis is considered to be a special kind of right because it goes beyond the basic provisions of intellectual property law, extends its scope, and offers specific protection that applies in certain specific cases. In European copyright law, sui generis is primarily associated with the right that is granted by Directive 96/9/EC¹³ to ensure the protection of substantial investment in the databases that may consist of the deployment of financial resources and/or the expending of time, efforts, and energy. This, however, does not exhaust the possibility of introducing the sui generis right for other objects, with a separate and independent regime being established in each case.

The sui generis right to AI-generated outputs under the Ukrainian Copyright Law is not similar to the sui generis right to databases and is an independent specific legal regime. There have been no cases of its application in Ukraine so far. However, given that this is the first global experience of implementing a special regime to protect AI-generated outputs, its analysis may be useful for other states that decide to follow the same path. This article analyses the grounds to protect AI-generated outputs by intellectual property rights and highlight the main elements of the sui generis rights to these objects under the Ukrainian Copyright Law. The article also outlines the challenges posed by the new legal regime and the issues not addressed by the Law. The author suggests ways to improve the new legal regime aimed at balancing it, taking into account the current state of technology development and the ability of AI to quickly generate a large number of objects, the interests of potential right holders, and society.

2. GROUNDS FOR GRANTING INTELLECTUAL PROPERTY RIGHTS TO AI-GENERATED OUTPUTS

Intellectual property protects diverse objects of very different natures and characteristics. Still, their protection has a common goal: to support creativity and innovation, contributing to economic growth and general welfare. Intellectual property is recognized as a special form of property that covers what can be owned and disposed of,¹⁴ however, it refers to intangible objects that are the product of mental labour and differ from the products of manual labour.¹⁵ Real property exists within the clearly defined three-dimensional boundaries

¹³ European Commission: *Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases*, Official Journal of the European Communities, L 77, 27.03.1996, pp. 20-28, paras 40, 41 of the Preamble, Art. 7(1), 7(4).

¹⁴ Bainbridge, D. I.: *Intellectual Property*, 8th ed., London: Longman Pearson, 2010, p. 10.

¹⁵ Sherman, B., Bently, L.: *The Making of Modern Intellectual Property Law: The British Experience*, Cambridge: Cambridge University Press, 2003, p. 9.

of a particular thing, while intellectual property has no such boundaries and can be embodied in various forms.¹⁶ An intellectual property object may be replicated in a large number of copies, and each person who buys such a copy acquires ownership of it and may use and dispose of it as a thing. Nevertheless, the buyer of the copy does not acquire the intellectual property right, which remains with the right holder.

Intellectual property forms a monopoly that exists during the term of legal protection and grants the right holder exclusive rights to the protected object. Because of this, the application of intellectual property law mechanisms is carried out when it is necessary to take care of the interests of creators, protect investments, or eliminate gaps or failures that hinder the normal functioning of the market and economy. Thus, there must be a specific goal that explains the reasons and needs for intellectual property protection, and cannot be achieved without the introduction of such protection.

In the case of AI-generated outputs, the purpose of their legal protection remains unclear. The dominant arguments in favour of its introduction, mentioned in academic circles in Ukraine¹⁷ and other countries,¹⁸ are to encourage and protect investments made in the creation and operation of AI. However, the potential decline in investment in AI development if legal protection is not implemented is only a theoretical assumption, while the reality shows the opposite.

The amount of investments in AI has increased or decreased over the years, but in general, it has been growing since 2011.¹⁹ Although AI-generated outputs are not protected in most countries, funding for generative AI remains high, and in 2023, its amount significantly exceeded all previous years. Ac-

¹⁶ Frome, J. C.: Claiming Intellectual Property, *The University of Chicago Law Review*, (76) 2009, p. 725.

¹⁷ Zerov, K.: Review of the theoretical approaches regarding the legal protection of objects generated by artificial intelligence systems in the field of copyright and related rights, *Theory and Practice of Intellectual Property*, (6) 2021, pp. 30-31.

¹⁸ Bonadio, E., McDonagh, L.: Artificial Intelligence as Producer and Consumer of Copyright Works: Evaluating the Consequences of Algorithmic Creativity, *Intellectual Property Quarterly*, (2) 2020, pp. 1-25; Dornis, T. W.: Artificial Creativity: Emergent Works and the Void in Current Copyright Doctrine, *Yale Journal of Law & Technology*, 22(1) 2020; Massadeh, F. et al.: The legal protection of artificial intelligence-generated work: The argument for sui generis over copyright, *Corporate Law & Governance Review*, 6(1) 2024, pp. 50-51.

¹⁹ Thormundsson, B.: Artificial Intelligence funding United States 2011-2019, 2025, <<https://www.statista.com/statistics/672712/ai-funding-united-states/>>, last accessed on 01/10/2025; Thormundsson, B.: Artificial intelligence software market revenue worldwide 2018-2025, 2022 <<https://www.statista.com/statistics/607716/worldwide-artificial-intelligence-market-revenues/>>, last accessed on 01/10/2025.

According to the Stanford Institute for Human-Centered Artificial Intelligence, in 2023, the generative AI sector attracted \$25.2 billion, nearly nine times the investment of 2022 and about 30 times the amount from 2019.²⁰ In 2024, private investment in AI increased by 44.5% compared to the previous year, and total investment increased more than thirteen times since 2014.²¹ In other words, generative AI is becoming an increasingly attractive sector for investment, regardless of whether it is somehow included in the field of intellectual property.

Other considerations for granting intellectual property rights to autonomous computer creations are also purely theoretical, as the market has not yet demonstrated any need that justifies the application of intellectual property rights and cannot be met in any other way.

The establishment of legal protection for AI-generated objects by individual countries indicates their desire to provide legal certainty to the relations associated with the use of these objects. This is a political decision that demonstrates the reaction of states to the challenges posed by AI and their willingness to respond to these challenges. The choice of the intellectual property regime can be explained by the fact that autonomous computer creations are intangible objects, and therefore, ownership of them may not seem to be an appropriate legal regime. The similarity of AI-generated texts, images, or music to human works contributes to their perception as intellectual property rather than property. Therefore, the choice of the intellectual property legal regime has a logical explanation. In addition, this choice is not limited to the available legal instruments and may include other solutions, such as the development of a special regime.

While recognizing the general advantages of the special regime, its specific conditions are of decisive importance as they determine the effectiveness of legal protection. Therefore, the development of such a regime requires a thoughtful and comprehensive approach, taking into account all existing needs and ensuring a sufficient balance between them. The new *sui generis* right in the Ukrainian Copyright Law partially meets this goal, while some of its aspects require clarification. The following analysis reveals the strengths and weaknesses of the new legal regime and suggests approaches to its improvement.

²⁰ Stanford Institute for Human-Centered Artificial Intelligence: *Artificial Intelligence Index Report 2024*, 2024.

²¹ Stanford Institute for Human-Centered Artificial Intelligence: *Artificial Intelligence Index Report 2025*, April 2025.

3. AN OVERVIEW OF THE SUI GENERIS RIGHT TO AN AI-GENERATED OUTPUT

3.1. AN AUTONOMOUS COMPUTER CREATION AS AN OBJECT OF PROTECTION

Ukrainian Copyright Law in Art. 33(1) establishes the protection of a non-original object generated by a computer program. In this provision, the use of the term “computer program” instead of “artificial intelligence” is noteworthy. Today, there is no unified definition of AI; it is interpreted as a machine-based system,²² a computational system,²³ and so on. However, there is no doubt that the basis of this system is a computer technology capable of performing specific tasks according to a built-in algorithm by processing information, analysing it, and giving definite results.²⁴ AI differs from other computer programs in that it can perform its functions without constant human control, in particular, autonomously generating certain objects. Also, the wording “non-original object generated by a computer program” emphasizes the legal status of AI, which is considered in Ukraine to be an object of copyright solely.²⁵ Although the doctrine discusses the possibility of recognizing the legal subjectivity of AI,²⁶ it is treated in Ukrainian legislation from the standpoint of its nature as a computer program.

For the protection of an AI-generated output, Art. 33(1) of the Ukrainian Copyright Law provides for two criteria: firstly, it is an object that differs from existing similar objects; secondly, it is formed as a result of the functioning of a computer program without the direct participation of an individual in the formation of this object.

²² Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act), *Official Journal of the European Union*, L 2024/1689, Art. 3(1).

²³ Wingström, R., Hautala, J., Lundman, R.: Redefining Creativity in the Era of AI? Perspectives of Computer Scientists and New Media Artists, *Creativity Research Journal*, 36(2) 2024, p. 177.

²⁴ Shtefan, A.: Creativity and artificial intelligence: a view from the perspective of copyright, *Journal of Intellectual Property Law & Practice*, 16(7) 2021, p. 727.

²⁵ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 6(1)(16).

²⁶ Burylo, Yu.: Legal personhood of artificial intelligence systems: to be or not to be?, *Entrepreneurship, economy and law*, (2) 2022, p. 23; Schirmer, J. E.: Artificial Intelligence and Legal Personality: Introducing “Teilrechtsfähigkeit”: A Partial Legal Status Made in Germany, in: Wischmeyer, T., Rademacher, T. (eds.): *Regulating Artificial Intelligence*, Cham: Springer, 2020, pp. 123-142.

The criterion of difference from other existing objects indicates that the sui generis right does not cover copies of something that was previously created by someone else. To obtain legal protection, the result of AI functioning must be different from existing objects and not duplicate them.

The criterion of generating an object without direct human participation means that a person did not have a direct creative influence on this object and that human intervention in the computer functioning is so insignificant that the specific content of the generated object solely depends on the computer's choice. Although the AI user forms the concept of this object and gives the AI specific instructions on what exactly should be generated, the AI autonomously and independently analyses the relevant data and makes a series of technical choices that lead to the formation of a certain result. This result does not depend on a human and therefore, is not original in terms of copyright.

Originality is defined in the Ukrainian Copyright Law as a criterion that characterizes a work as the result of the author's own intellectual creative activity and reflects the creative decisions made by the author during the creation of the work.²⁷ This provision is based on the conclusions of the Court of Justice of the European Union (CJEU) that explained originality through several elements: the work is original in the sense that it is its author's own intellectual creation; an intellectual creation is an author's own if it reflects the author's personality; if the author was able to express his creative abilities in the production of the work by making free and creative choices.²⁸

An autonomous computer creation does not meet these conditions because it does not express a human's creative choice. The Ukrainian Copyright Law directly stipulates that an AI-generated object is non-original because it does not originate from a human. In addition, the Law uses the terms "generated" or "formed" concerning this object, while the provisions on copyright in works use the term "created". Although the use of verbs in this case is not decisive, it nevertheless further distinguishes between autonomous computer creations and human works.²⁹

²⁷ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 1(35).

²⁸ Judgment of the Court (Third Chamber) of 1 December 2011, Case C-145/10, *Eva-Maria Painer v Standard VerlagsGmbH and Others*, ECLI:EU:C:2011:798, paras 87–89.

²⁹ Doroshenko, O., Tarasenko, L.: The sui generis right to non-original objects generated by a computer program: novelties of legal regulation, *Teoriia i praktyka intelektualnoi vlasnosti*, (3) 2023, p. 90.

At the same time, works created by individuals using computer technologies are not considered non-original objects generated by a computer program.³⁰ There are many ways AI can be used as an accompanying tool for human creativity and can optimize certain stages of work creation. When the formation of an object depends on the direct creative choice of a human and AI serves as a tool to implement human creative efforts, this falls within the scope of copyright, and not the sui generis right.

3.2. HOLDERS OF THE SUI GENERIS RIGHT TO AN AI-GENERATED OUTPUT

The Ukrainian Copyright Law in Art. 33(2) provides for two groups of holders of the sui generis right to non-original objects generated by a computer program.

Firstly, these are the copyright holders of a computer program, which include the developers of generative AI, their heirs, and other individuals or legal entities to whom the copyright to generative AI has been transferred. In practice, such a copyright holder is often an investor who finances the creation of AI.

Secondly, the holder of the sui generis right to an AI-generated object may be a legal AI user under a license agreement. Granting the user rights to the result of autonomous AI functioning is supported by many researchers,³¹ since the end user initiates the generation of a certain object and formulates a task for the AI regarding this object. At the same time, according to Art. 33(2) of the Ukrainian Copyright Law, the sui generis right holder to an autonomous computer creation may be determined by an agreement. The license terms for the use of AI may stipulate that the sui generis right is automatically transferred to the AI copyright holder, and the user is granted a license to use the generated object. The agreement may also determine that the right to the AI-generated output belongs to the user, and the AI copyright holder is granted a license to use this object in certain limited ways, for example, to advertise this AI. It is less likely, but it is also possible to recognize the sui generis right simultaneously for the AI copyright holder and the user. Thus, in this regard, the Ukrainian Copyright Law allows for various options.

³⁰ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 33(1).

³¹ Denicola, R. C.: *Ex Machina: Copyright Protection for Computer-Generated Works*, *Rutgers University Law Review*, (69) 2016, pp. 286-287; Samuelson, P.: *AI authorship?*, *Communications of the ACM*, 63(7) 2020, pp. 20-22; Hugenholtz, P. B., Quintais, J. P.: *Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?*, *IIC - International Review of Intellectual Property and Competition Law*, 52 2021, p. 1213.

Only an individual or legal entity can become a sui generis right holder, but not the AI. Although there are proposals to recognize the right to the generated content for the AI itself by granting it the legal status of an electronic person,³² Ukrainian legislation does not support this idea.

3.3. THE SCOPE AND DURATION OF LEGAL PROTECTION

The sui generis right to an AI-generated output arises due to the fact of generating this object and is valid from the moment of its generation.³³ This is similar to automatic protection in copyright, which arises from the moment of creation of a work and does not require any formalities.³⁴ No state registration, deposit, or any other actions are established to acquire the sui generis right to an AI-generated object, so the generation of an autonomous computer creation is a sufficient basis for its legal protection.

The sui generis right to an AI-generated output is purely economic and does not include moral rights.³⁵ In the copyright doctrine, moral rights are understood primarily as human rights,³⁶ based on the provision of Art. 27(2) of the Universal Declaration of Human Rights: everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which they are the author.³⁷ Given the absence of human creative input into an AI-generated object, the Ukrainian Copyright Law does not recognize moral rights of investors, developers, or users of AI in connection with the generation of an autonomous computer creation.

The scope of the sui generis right to an AI-generated output coincides with the economic rights to work:³⁸ the sui generis right holder has the right to use the AI-generated output in any way(s), as well as the exclusive right to allow or prohibit other persons from using this output. The ways of use include reproduction, distribution, communication to the public, rework, as well as other ways that cor-

³² Burylo, Yu.: Legal personhood of artificial intelligence systems: to be or not to be?, *Entrepreneurship, economy and law*, (2) 2022, p. 23.

³³ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 33(5).

³⁴ Id. Arts. 9(1), 9(3).

³⁵ Id. Art. 33(3).

³⁶ Härkönen, H.: Fashion and Authors' Moral Rights, *GRUR International*, 73(5) 2024, p. 408.

³⁷ United Nations: *Universal Declaration of Human Rights*, 1948.

³⁸ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 33(4).

respond to the nature of the respective object.³⁹ In addition, the sui generis right to an AI-generated output can be both licensed⁴⁰ and transferred.⁴¹ All copyright exceptions⁴², such as citation, use in the educational process, creation of a parody, and other exceptions provided by the Ukrainian Copyright Law, apply to the sui generis right to an AI-generated object.⁴³ The term of protection of the sui generis right expires in 25 years, calculated from January 1 of the year following the year in which the non-original object was generated.⁴⁴

As this review shows, the sui generis right to a non-original object generated by a computer program is completely in line with the content of economic copyright and differs from it only in a shorter term of protection.

Overall, the new legal regime has the advantages of not interfering with the copyright system by distinguishing between AI-generated objects and human works, not recognizing the legal personality of AI, and being flexible in determining the right holder. However, several aspects raise concerns about the effectiveness of the sui generis right to AI-generated outputs. This includes the criteria for the protectability of these objects, the absence of any exceptions to their legal protection, and a fairly large scope of economic rights with a long term of their validity. Sharing the opinion that the intellectual property rights protection should not be excessive, the author further analyses the new legal regime and considers possible ways to solve them.

4. ISSUES AND CHALLENGES OF THE NEW LEGAL REGIME

4.1. UNCERTAINTY OF THE PROTECTABILITY CRITERIA

As mentioned above, an autonomous computer creation must be different from other existing similar objects.⁴⁵ This wording is rather abstract in terms of the

³⁹ Id. Art. 12(1).

⁴⁰ Id. Art. 33(8).

⁴¹ Id. Art. 33(9).

⁴² In Ukraine, the list of copyright exceptions is exhaustive, i.e., the use of a work without the copyright holder's permission is possible only in those ways directly provided for by law and with mandatory compliance with the conditions specified for each exception, such as the scope and purpose of use, the need to indicate the author's name.

⁴³ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 33(10).

⁴⁴ Id. Art. 33(6).

⁴⁵ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 33(1).

basis for comparison⁴⁶ and does not allow for a clear determination of whether it applies only to other AI-generated objects or also includes works and objects of related rights. Although it is believed that “existing similar objects” should mean only the results of the generative AI functioning,⁴⁷ the legal provisions do not express certainty on this point. Therefore, it is not clear what exactly an autonomous computer creation should differ from.

The question also arises as to how much an AI-generated object should differ from other objects and how this dissimilarity should be established. If AI recreates a famous painting and makes minor changes to it, for example, changes the color scheme of certain elements of the painting, is this enough for legal protection? To illustrate this issue, the Lexica generative AI was tasked with generating an image of the Mona Lisa with white hair. The AI itself decided to slightly change the hairstyle, the shape of the nose, cheeks, and chin, and made the colors of the image more contrasting.⁴⁸ The generated image is not a literal copy of Leonardo da Vinci’s painting and contains several noticeable differences from it, i.e., it meets the criterion of being different from an existing similar object. Nevertheless, is the protection of such images justified and needed? When the generated image is visually identical to another existing image, but contains one additional and visually imperceptible bit of information, formally, there is a difference between the two images, but is it sufficient to obtain legal protection? The lack of legislative specificity in this regard may make it difficult to establish whether a certain object falls under the *sui generis* right or not. Without a clear criterion for the protectability of AI-generated objects, there is a risk of granting excessive and unjustified protection to almost every result of autonomous AI functioning.

In this regard, it was proposed to apply an originality test adapted for AI-generated outputs.⁴⁹ Such a test should evaluate whether, if an autonomous computer creation was created by a notional human author, would it be considered an

⁴⁶ Militsyna, K.: Legal Framework for Output Based on Artificial Intelligence: Ukraine’s Place on the Global Search Path, in: Richter, H. (ed.): *Competition and Intellectual Property Law in Ukraine*, Berlin: Springer, 2023, pp. 576-577.

⁴⁷ Zerov, K.: Do generative artificial intelligence systems dream of electric sheep? The concept and conditions of protection of objects generated by generative artificial intelligence systems in Ukraine, *Theory and Practice of Intellectual Property*, (4-5) 2022, p. 92.

⁴⁸ Shtefan, A.: AI-generated outputs: legal protection in Ukraine, Conference presentation, “Intellectual Property Today and Tomorrow”, Lublin, Poland, 2024.

⁴⁹ Bonadio, E., McDonagh, L.: Artificial Intelligence as Producer and Consumer of Copyright Works: Evaluating the Consequences of Algorithmic Creativity, *Intellectual Property Quarterly*, 2020(2).

intellectual creation reflecting the personality of this notional person?⁵⁰ However, unlike humans, AI has no personality, inner self, or feelings that could be embodied in a work, but only a built-in algorithm that executes programmed commands. The ability of an AI to make random choices is not a manifestation of the AI's personality, as this possibility is directly provided by the program codes.⁵¹ The random and unexpected choice made by a computer in the process of generating a certain object is nothing more than the execution of a task following built-in instructions. AI obeys the commands programmed into it and does not have the freedom to decide whether to execute these commands or not;⁵² it is forced to choose between the analyzed data because it is part of its functionality. Therefore, it is unclear what exactly should be analogous to the reflection of personality in an autonomous computer creation, and how to determine whether the random and purely technical choice of AI is an expression of some notional personality.

There is also a suggestion to apply the criterion of individual character to AI-generated objects by analogy with the acquisition of legal protection for industrial designs.⁵³ In the EU, a design shall be considered to have individual character if the overall impression it produces on the informed user differs from the overall impression produced on such a user by any design which has been made available to the public.⁵⁴ This approach can be useful in determining which AI-generated output is eligible for legal protection, as it means that the output is not a mere reproduction of something that already exists and embodies something as different as it is sufficient to create a different overall impression. At the same time, for the potential implementation of this criterion, it is necessary to establish who should be considered an informed user.

In the context of industrial design, the CJEU explained that the qualifier 'informed' suggests that, without being a designer or a technical expert, the user knows the various designs which exist in the sector concerned, possesses a

⁵⁰ AIPPI UK: Response to UK Government Open Consultation Artificial Intelligence and Intellectual Property, 2020.

⁵¹ Ginsburg, J. C., Budiardjo, L. A.: Authors and Machines, *Berkeley Technology Law Journal*, 34(2) 2019, p. 398.

⁵² Shtefan, A.: Creations of artificial intelligence: in search of the legal protection regime, *JIPITEC – Journal of Intellectual Property, Information Technology and E-Commerce Law*, 14(1) 2023, p. 97.

⁵³ Zerov, K.: Do generative artificial intelligence systems dream of electric sheep? The concept and conditions of protection of objects generated by generative artificial intelligence systems in Ukraine, *Theory and Practice of Intellectual Property*, (4-5) 2022, p. 92.

⁵⁴ European Commission: *Council Regulation (EC) No 6/2002 of 12 December 2001 on Community designs*, Official Journal of the European Communities, L 3, 2002, p. 1-24, Art. 6(1).

certain degree of knowledge with regard to the features which those designs normally include, and, as a result of his interest in the products concerned, shows a relatively high degree of attention when he uses them.⁵⁵

However, industrial design is a field of professional activity of a relatively small part of society, while many people have creative hobbies unrelated to their profession. Photography, drawing, poetry, and many other creative hobbies include people to the circle of authors because such hobbies can lead to the creation of works. If, by analogy with industrial designs, authors are excluded from the category of informed user for the perception of AI-generated objects, this will apply to every person who has created any work, even an amateur one, at least once in their life. This will greatly narrow the circle of persons who can be considered informed users. It is possible to differentiate between authors when the author of certain types of works is not considered to be an informed user, regarding only the same type of AI-generated outputs. For example, a composer is not an informed user in the case of AI-generated music, but falls into this category when it comes to AI-generated images or prose. Thus, if the criterion of difference from existing similar objects in the Ukrainian Copyright Law will be replaced by the criterion of individual character, it is necessary to clarify who is meant by an informed user.

As of today, the conditions for granting legal protection to AI-generated outputs remain insufficiently clear, which reduces the effectiveness of the sui generis right regime.

4.2. NO EXCEPTIONS TO LEGAL PROTECTION

The determination of the object of protection in Art. 33(1) of the Ukrainian Copyright Law actually covers all results of the autonomous functioning of a computer. While the Law provides for a list of objects that are created by humans but are not protected by copyright, in particular, news reports in the form of ordinary press information,⁵⁶ non-original databases,⁵⁷ non-original photographic images,⁵⁸ or abbreviations,⁵⁹ there is no such list of AI-generated outputs. Hence, any autonomous computer creations may be protected, including

⁵⁵ Judgment of the Court of 20 October 2011 in case C-281/10 P, *PepsiCo, Inc. v Grupo Promer Mon Graphic SA*, ECLI:EU:C:2011:679, para 59.

⁵⁶ Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 8(1)(1).

⁵⁷ *Id.* Art. 8(1)(6).

⁵⁸ *Id.* Art. 8(1)(8).

⁵⁹ *Id.* Art. 8(1)(7).

those that should not be protected by any regime that provides for a monopoly on their use, or those that are inappropriate to be protected for other reasons.

In particular, reports of current events in the form of ordinary press information are excluded from the scope of copyright due to lack of originality and, at the same time, because their legal protection would obstruct the freedom of dissemination of information guaranteed by the Constitution of Ukraine.⁶⁰ If AI generates such a report on current events, it falls under protection, since the Ukrainian Copyright Law does not contain any restrictions on this matter. This creates a risk of abuse when the sui generis right holder prohibits the dissemination of certain information.⁶¹ Another example is a public transportation schedule, telephone directory, or other non-original database that is not the result of significant investment and does not fall under the sui generis right to a database. Although in the case of a human creation, such a database is not protected at all, it falls under the new legal regime only because it is generated by AI.

In addition, the generated deepfakes can be harmful. These are materials formed by using the voice and/or image of a person who did not participate in the formation of these materials. Despite the possibility of bringing benefits, such as creating visual effects in film production and entertainment shows, deepfakes can be used for the purpose of falsification, blackmail, bullying, illegal influence on public opinion, and other manipulations. In case of a copyrighted work, the Civil Code of Ukraine stipulates that a work may not be made available to the public if it violates a person's right to privacy, harms public order, or the physical and moral health of society.⁶² However, there are no such restrictions on the content of AI-generated objects; therefore, the legal protection can potentially cover harmful deepfakes or computer viruses AI autonomously generates.

Recognition of legal protection for all results of the autonomous functioning of a computer that meets the criterion of distinction from other similar objects leads to the granting of excessive protection and devaluation of intellectual property rights. There should be a distinction between when such protection is justified and when it should not be imposed only because there are purely formal grounds for it. Therefore, it is necessary to carefully analyse the cases

⁶⁰ Constitution of Ukraine, *The Official Bulletin of the Verkhovna Rada of Ukraine (BVR)*, No. 254k/96-VR, 1996.

⁶¹ Zerov, K.: Do generative artificial intelligence systems dream of electric sheep? The concept and conditions of protection of objects generated by generative artificial intelligence systems in Ukraine, *Theory and Practice of Intellectual Property*, (4-5) 2022, p. 93.

⁶² Verkhovna Rada of Ukraine: *Civil Code of Ukraine of January*, No. 435-IV, 2003.

when the sui generis regime should not apply to AI-generated objects and include a list of such cases in the law.

4.3. AUTOMATIC ACQUISITION OF THE SUI GENERIS RIGHT

At first glance, the absence of formalities for obtaining legal protection of AI-generated outputs seems to be an advantage for potential rights holders. However, it is still not confirmed whether they are interested in acquiring such rights. Although the need for legal protection of the results of autonomous computer functioning has been argued in many scientific and analytical materials, there have been no corresponding collective initiatives from AI developers or investors.⁶³ Keeping in mind that intellectual property rights provide not only preferences but also impose liability on the right holder, there should be a certainty that the persons acquiring the sui generis rights are ready to bear the risk of liability for violations that may potentially be committed in the AI-generated output.

The formation of each such output is the result of AI's use of many different data, and usually, this output does not coincide with the analysed data.⁶⁴ At the same time, there is currently no way to determine what exactly was analysed by AI and how it is used.⁶⁵ AI-generated output is formed based on many random choices of the AI, which are generally unpredictable,⁶⁶ and even its developers cannot explain why a certain choice is made⁶⁷ and what data was used for it. AI can commit various violations at different stages of its functioning, which can form a layered landscape of liability for these violations.⁶⁸ In this article, the author does not aim to highlight the problem of using protected objects in the AI training phase, which can cause violations, but rather to consider infringements that may occur at the stage of generating an autonomous computer creation.

⁶³ Shtefan, A.: Creations of artificial intelligence: in search of the legal protection regime, *JIPITEC – Journal of Intellectual Property, Information Technology and E-Commerce Law*, 14(1) 2023, p. 99.

⁶⁴ O'Toole, K., Horvát, E. A.: Extending human creativity with AI, *Journal of Creativity*, 34(2) 2024, pp. 1100080.

⁶⁵ Rai, A.: Explainable AI: from black box to glass box, *Journal of the Academy of Marketing Science*, 48(1) 2020, p. 137.

⁶⁶ Ginsburg, J. C., Budiardjo, L. A.: Authors and Machines, *Berkeley Technology Law Journal*, 34(2) 2019, pp. 398-400.

⁶⁷ Asatiani, A. et al.: Challenges of Explaining the Behavior of Black-Box AI Systems, *MIS Quarterly Executive*, 19(4) 2020, pp. 259-260.

⁶⁸ Rosati, E.: Infringing AI: Liability for AI-Generated Outputs under international, EU, and UK Copyright Law, *European Journal of Risk Regulation*, 16(2) 2025, pp. 619-621.

AI can reproduce original elements of a copyrighted work in a generated output or access confidential data and incorporate them into a generated output, which will not be obvious to a potential sui generis right holder. Making available to the public a generated object that reproduces a fragment of a protected work, discloses confidential data, or otherwise interferes with the rights and interests of others may cause negative consequences. Although AI models capable of recognizing materials that may infringe copyright have already been developed,⁶⁹ many other types of infringements cannot be accurately identified before a generated object is made available to the public. AI investors and users cannot have full confidence that there is no threat of prosecution associated with making an AI-generated output available to the public. In such circumstances, a potential sui generis right holder may find the prospect of legal protection unattractive,⁷⁰ and therefore, they should have the freedom to decide whether they want to acquire the intellectual property rights and whether they are willing to bear the risks associated with it.

This issue can be solved by introducing state registration of the sui generis rights in autonomous computer creations, similar to the registration of trademark rights. Initially, the certificate of the right to an AI-generated object may be valid for five years, with the possibility of extending it for another five years if the right holder is interested in this. Unlike trademark rights, in the case of AI-generated outputs, it is advisable to determine the maximum term of the sui generis right validity.⁷¹ The registration procedure should not be complicated, and its introduction may prevent excessive legal protection that may not be needed by potential right holders, and will also optimize the duration of protection discussed below.

4.4. EXCLUSIVE RIGHT OF LONG-TERM VALIDITY

The new sui generis right provides for a full range of exclusive rights allowing the right holder to control the use of an AI-generated object by others, including the possibility of reworking this object. While reworking for the purpose of creating a parody or caricature falls under copyright exceptions and may be

⁶⁹ Kale, S.: The Future of IP Protection: Harnessing the Power of AI Language and Vision Models, *Journal of Advanced Research Engineering and Technology*, 3(1) 2024, p. 270.

⁷⁰ Senftleben, M., Buijtelaar, L.: Robot Creativity: An Incentive-Based Neighboring Rights Approach, *European Intellectual Property Review*, 42(12) 2020, pp. 797-812.

⁷¹ Shtefan, A.: Objects generated by a computer program (artificial intelligence) without direct human intervention: the world's first experience of legal protection, *Theory and Practice of Intellectual Property*, (1-2) 2023, p. 82.

carried out without the permission of the right holder,⁷² any other reworking requires such permission. In combination with the 25-year term of protection of the sui generis right, this raises doubts about whether the new regime sufficiently takes into account the current state of technology development.

The 25-year duration of the legal protection of autonomous computer creations would have been justified in previous years when AI was capable of generating single objects for a rather long period of time. For example, The Next Rembrandt AI was created to generate a portrait that imitates the style of the Dutch artist Rembrandt Harmenszoon van Rijn. A team of specialists analysed the AI's operation at each stage and gave it new tasks to achieve the desired result. The project lasted for 18 months and culminated in the development of one image in 2016.⁷³ If the generative capabilities of AI remained at the same level and each AI-generated output appeared as a result of many efforts, granting exclusive rights to it for 25 years would be appropriate. However, AI systems have evolved significantly and acquired the ability to quickly generate a large number of different objects. Therefore, it seems that the new regime should be revised both in terms of the scope of protection and its duration.

Regarding the scope of protection of AI-generated outputs, there is an opinion that it should be granted only for literal copying, leaving society the opportunity to freely rework autonomous computer creations,⁷⁴ which is worthy of attention. Although the closeness of the regime of protection of AI-generated outputs to the copyright regime is supported at the theoretical level,⁷⁵ the new sui generis right should not simply duplicate economic copyright. Minimal human involvement in the functioning of generative AI should be proportionally reflected in the way the results of this functioning are protected. If autonomous computer creations can be freely reworked, it will help to better balance the interests of AI users and society. At the same time, the sui generis right holder will control the reproduction and use of AI-generated object reproductions which will sufficiently ensure their economic interests. However, this raises

⁷² Verkhovna Rada of Ukraine: *Law of Ukraine on Copyright and Related Rights*, 1993, Art. 22(2)(9), 33(10).

⁷³ Brown, M.: New Rembrandt' to be unveiled in Amsterdam, *The Guardian*, 5.04.2016.

⁷⁴ Bonadio, E., McDonagh, L.: Artificial Intelligence as Producer and Consumer of Copyright Works: Evaluating the Consequences of Algorithmic Creativity, *Intellectual Property Quarterly*, (2) 2020, pp. 1-25.

⁷⁵ Doroshenko, O., Tarasenko, L.: The sui generis right to non-original objects generated by a computer program: novelties of legal regulation, *Teoriia i praktyka intelektualnoi vlasnosti*, (3) 2023, pp. 87-88; Massadeh, F. et al.: The legal protection of artificial intelligence-generated work: The argument for sui generis over copyright, *Corporate Law & Governance Review*, 6(1) 2024, p. 54.

the question of how to distinguish whether a certain object is not a copyrighted work and can be freely processed, which is relevant for Ukraine and other countries that contain an exhaustive list of copyright exceptions. For this purpose, a special symbol can be established which, similar to the copyright symbol, would consist of a circled capital letter “A” and would indicate that the object is artificial, and provide for the obligation of the sui generis right holder to attach this symbol to the AI-generated object and its copies.⁷⁶ This will inform the users about the object’s origin and the fact that it is not protected from reworking.

The 25-year term established for the new sui generis right in the Ukrainian Copyright Law is not properly justified. Although such a term is mentioned in the Berne Convention in relation to photographic works and works of applied art⁷⁷ and the Directive 93/98/EEC on the protection of rights to a work that is first published after the expiry of its copyright protection⁷⁸, there is no explanation why it may be applied to the protection of autonomous computer creations.

The 25-year term of the sui generis right duration would have been justified in the case of the Rembrandt-style portrait described above; however, in the context of modern AI development, when dozens and hundreds of new objects can be generated every minute, there are doubts whether this duration is reasonable. At the same time, the two-year⁷⁹ or three-year⁸⁰ term of protection proposed in the doctrine seems too short to make the application of the special regime attractive to the right holders. There is a risk that with a very short term of protection, they will claim authorship of AI-generated objects hiding the fact that they used generative technologies to obtain copyright protection.⁸¹

⁷⁶ Shtefan, A.: Objects generated by a computer program (artificial intelligence) without direct human intervention: the world’s first experience of legal protection, *Theory and Practice of Intellectual Property*, (1-2) 2023, p. 83.

⁷⁷ World Intellectual Property Organization (WIPO): Berne Convention for the Protection of Literary and Artistic Works, 1979, Art. 7(4).

⁷⁸ European Commission: *Council Directive 93/98/EEC of 29 Oct. 1993 harmonizing the term of protection of copyright and certain related rights*, Official Journal of the European Communities, L 290, 1993, Art. 4.

⁷⁹ Moerland, A.: Artificial Intelligence and Intellectual Property Law, in: Lim, E., Morgan, P. (eds.): *The Cambridge Handbook of Private Law and Artificial Intelligence*, Cambridge University Press, 2022, pp. 362–383.

⁸⁰ Bonadio, E., McDonagh, L.: Artificial Intelligence as Producer and Consumer of Copyright Works: Evaluating the Consequences of Algorithmic Creativity, *Intellectual Property Quarterly*, (2) 2020, pp. 1-25.

⁸¹ Dornis, T. W.: Artificial Creativity: Emergent Works and the Void in Current Copyright Doctrine, *Yale Journal of Law & Technology*, 22(1) 2020.

On the other hand, ten-year or longer legal protection must have a sufficient explanation, which remains unclear nowadays. In the author's opinion, the proposed approach to mandatory state registration of the sui generis right and the possibility of extending the validity of the certificate will be the optimal solution. A minimum five-year term of protection may be sufficient for many rights holders, and if the AI-generated output remains commercially successful or there are other reasons to extend its protection, such an opportunity will be provided. This may balance the new legal regime and bring it closer to a more justified level.

5. CONCLUSION

The sui generis right regime to objects generated by a computer program without direct human intervention, recently introduced in the Ukrainian Copyright Law, has provided legal certainty to these objects. They are clearly distinguished from human works and protected separately without interfering with the copyright paradigm. The determination of rights holders covers only individuals and legal entities and does not provide for legal subjectivity for AI. The flexibility in determining the sui generis right holder can be positively assessed in practice, as it allows for different needs to be taken into account.

At the same time, the new legal regime addresses only a part of the challenges posed by generative AI to intellectual property law, leaving many debatable issues. Unclear criteria for the AI-generated outputs' protectability pose a risk of creating obstacles to the freedom of information dissemination and lead to paradoxical situations where an object is protected only because it is autonomously generated by AI, while the creation of such an object by a person does not imply intellectual property rights to it. Automatic granting of protection does not take into account the intentions of the right holders and their willingness to bear responsibility for potential infringements. Providing the sui generis right holder with the full scope of exclusive rights and establishing a long term of their duration is not relevant to the constant evolution of AI and its ability to generate a large number of objects in a short time. Overall, the current legal protection seems excessive and should be adapted so that it will correspond to the modern level of computer technology development, and satisfy the interests of both potential rights holders and society.

Nevertheless, the identified weaknesses of the new sui generis right implemented in Ukraine seem to be useful information for other states. Sooner or later, the legal systems of the world will have to answer the question of whether AI-generated objects are protected, and if so, how they are protected. The development of a regime for their legal protection requires taking into account

many aspects to ensure that this protection is appropriate and does not provide unjustified advantages.

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