

General Assembly Sixth Committee (Legal)

Research Reports



Forum: General Assembly Sixth Committee (Legal)

Issue: Implementing measures to protect intellectual property in the age of artificial intelligence

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Introduction

Of all the advancements in modern digital technology, artificial intelligence is undoubtedly one of the most groundbreaking, but also one of the most risk-bearing, and which requires significant examination before it can be implemented at a larger scale. One of many concerns surrounding artificial intelligence is its implications for intellectual property and copyright, rights by which the creators of original works are protected from unauthorized redistribution or other use of those works by anyone else. The issue with artificial intelligence is that it does not simply generate entirely original and uninspired content, but rather is trained on large pools of existing human-made content, from which it is able to understand how to synthesize content. As a result, a legal question that has arisen is whether the use of copyrighted material in this training material renders generated content in violation of copyright. Furthermore, there is yet another question, of whether content generated by artificial intelligence can be copyrighted, and if so, who that copyright should belong to. On the one hand, it could belong to the person who prompted the artificial intelligence to generate the content in question, while on the other, it could belong to the company which owns and operates the artificial intelligence. These questions, among others, demand a clear and decisive answer from the international community, which will establish a global precedent on the use of artificial intelligence in regards to intellectual property.

Definition of Key Terms

Artificial Intelligence (AI)

The simulation of human intelligence processes by machines, especially computer systems, including learning, reasoning, and self-correction.

Intellectual Property (IP)

Legal rights that result from intellectual activity in the industrial, scientific, literary, and artistic fields, including patents, trademarks, and copyrights.

Intellectual Property Rights (IPR)

The rights given to persons over the creations of their minds, typically giving the creator an exclusive right over the use of their creation for a certain period.

AI Ethics

The branch of ethics examines the moral implications and challenges of AI technologies.

Bias in AI

The tendency of an algorithm to produce results that are systematically prejudiced due to erroneous assumptions in the machine learning process.

AI-Generated Content

Content created by artificial intelligence systems without direct human input, raises questions about ownership and rights.

Copyright

The exclusive legal right, given to an originator or an assignee to print, publish, perform, film, or record literary, artistic, or musical material, and to authorize others to do the same.

Data Security

Protective measures and protocols that organizations implement to prevent unauthorized access to databases and digital systems.

Data Privacy

The aspect of information technology (IT) deals with the ability of an organization or individual to determine what data in a computer system can be shared with third parties.

Patent

A government authority or license conferring a right or title for a set period, especially the sole right to exclude others from making, using, or selling an invention.

Machine Learning

A branch of AI involving the use of algorithms and statistical models to enable computers to improve their performance on a specific task with data, without using explicit instructions.

Deep Learning

A subset of machine learning involving neural networks with many layers, enabling the analysis of complex data representations.

Data Mining

The practice of examining large databases to generate new information and find hidden patterns.

Algorithm

A process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer.

Natural Language Processing (NLP)

A branch of AI that helps computers understand, interpret, and respond to human language in a valuable way.

Fair Use

A doctrine that permits limited use of copyrighted material without having to first acquire permission from the copyright holder, under certain conditions.

Creative Commons

A nonprofit organization that provides free licenses and tools to creators to help them share their work with the public.

Open Source

Software for which the original source code is made freely available and may be redistributed and modified.

Technological Singularity

A hypothetical point in the future when technological growth becomes uncontrollable and irreversible, resulting in unforeseeable changes to human civilization.

Regulatory Compliance

Adherence to laws, regulations, guidelines, and specifications relevant to an organization's business processes.

Digital Millennium Copyright Act (DMCA)

A 1998 United States copyright law that implements two 1996 treaties of the World Intellectual Property Organization (WIPO) and criminalizes production and dissemination of technology, devices, or services intended to circumvent measures that control access to copyrighted works.

Major Countries and Organizations Involved

United States of America

The United States of America is undoubtedly the world's leading AI superpower, with some of the world's premier AI companies, such as OpenAI, Google, Microsoft, Meta, and Amazon, among others, being based there. Despite this fact, the US has very little federal law in the way of AI, and practically none when it comes to AI's involvement in IP and this topic overall. This has not, however, stopped OpenAI, Microsoft, and other AI companies from being met with legal action in American courts invoking standard US copyright law from authors of works supposedly used in the training of AI models, such as the Writer's Guild and many newspapers and journalism groups. Such legal action remains ongoing, however, and establishing legal precedent on the matter has proven difficult.

United Kingdom

The United Kingdom is another major player in the AI realm with billions of annual GDP funds directed towards AI research, but which has more of a clear direction towards the topic. Specifically, the UK Copyright, Designs, and Patents Act of 1988 contains provisions that state that if a work has "... no human author, the person by whom the arrangements necessary for the creation of the design are made shall be taken to be the author." As a result, copyright can still be asserted even in the case of AI-generated work. However, this provision has come under criticism with the developments in AI due to the vagueness as to whether authorship under the provision would be given to the person who prompts the AI model to create the work in question, or to the creator of the AI model used to create the work. An AI Safety Summit was also hosted in the UK in November 2023, and it was there that the Bletchley Declaration, a declaration on AI drafted by the attending nations, was made.

China

The People's Republic of China is yet another major competitor in the AI sector, with its own tech companies such as Baidu, Tencent, and Alibaba developing AI models. The PRC heavily encourages this development and has continuously marked AI as a top priority for the country's development in its five-year plans for National Economic and Social Development

and Long-Range Objectives, stating that it aims to become the world's leading AI nation by 2030. Contrary to many nations, particularly the US, the Chinese government has approached AI head-on and has gotten to work early on in developing preventative measures aimed at eliminating the potential harms of AI, specifically and explicitly referencing IP and its protection while doing so.

European Union

The European Union (EU) is a union of 27 European nations that works to unify and improve the political and economic sectors of its members. The EU has taken a remarkable step in regulating AI with the EU AI Act, proposed in December of 2023, which is touted as the world's first comprehensive AI law. The act assesses the risk of AI both made in the EU and made elsewhere but used in the EU, and prohibits or otherwise regulates it based on how much risk it poses. High-risk AI, for example, AI which creates fake content made to deceive the public, or which is used to discriminate against people on any basis, is strictly prohibited. Lesser-risk AI, like general-purpose AI, is simply regulated to ensure proper use and implementation. The European Commission, part of the EU, also proposed an IP Action Plan, in which it addresses the threat of AI and other technological advancements to IP and advises other EU bodies on how to approach the matter. Overall, and with many other steps in this direction, the EU has been quick to approach AI with a risk-avoidant approach, although it also aims to harness the power of AI, with a Board and Committee on AI to be made part of the EU having been proposed, among other actions.

Organization for Economic Cooperation and Development

The Organization for Economic Cooperation and Development (OECD) is an intergovernmental organization comprised of 38 current member states which aims to stimulate economic development and strengthen world trade. With the rise in AI development and the economic possibilities that are unlocked by it, the OECD has expanded its scope to AI and has set its own AI Principles, which many OECD countries have signed on to, and which many non-OECD countries have been influenced by in their own policy. Much of the OECD's action in the AI realm has served to protect data security and privacy, often including issues in IP.

World Intellectual Property Organization

The World Intellectual Property Organization (WIPO) is the United Nations agency that deals with IP and which facilitates intergovernmental discussion on the matter. With AI posing as large of a concern as it does to IP, the WIPO continues to host intergovernmental conversations on AI, where government officials and representatives of key stakeholders in the industry have the opportunity to contribute to the developing consensus surrounding the issue.

Timeline of Events

Date	Description of Event
2016	The rise of AI technologies prompts discussions on their implications for IP rights, particularly regarding ownership and infringement issues related to AI-generated content.
2018	Various jurisdictions begin to recognize the need for updated IP frameworks to accommodate AI innovations, leading to initial proposals for reforms.
2020	The European Union proposes the AI Act, aiming to create a comprehensive legal framework that addresses the ethical and regulatory challenges posed by AI, including IP protection.
2021	Legal scholars and practitioners highlight the inadequacies of existing IP laws in addressing AI-generated works, emphasizing the need for distinct guidelines for AI-assisted versus AI-generated content.
2022	International organizations such as the World Intellectual Property Organization (WIPO) initiate discussions on harmonizing IP laws globally to better protect innovations arising from AI technologies.
2023	Several countries begin implementing new guidelines and best

practices for IP protection in the context of AI, focusing on patentability criteria and copyright ownership issues related to AI-generated works.

2024

Continued evolution of IP laws, with an emphasis on adapting legal frameworks to safeguard AI innovations while fostering an environment conducive to creativity and technological advancement. Legal experts advocate for proactive IP management strategies among AI companies to mitigate risks of infringement and ensure compliance with emerging regulations.

Ongoing discussions about the role of AI in IP enforcement and the potential for AI technologies to monitor and protect IP rights, highlighting the need for collaboration among legislators, legal experts, and technology developers to create effective and adaptable IP regulations.

Relevant UN Treaties and Events

EU Artificial Intelligence Act

The European Union's AI Act is a pioneering legal framework aimed at regulating AI technologies. It emphasizes the importance of IP protection within the context of AI development and deployment, addressing challenges such as copyright and patent rights for AI-generated content. The final text of the AI Act is expected to be adopted in April 2024, marking a significant step in harmonizing AI regulations across EU member states.

AI Liability Directive

Alongside the AI Act, the AI Liability Directive proposes rules to ensure that individuals harmed by AI systems receive the same level of protection as those harmed by other technologies. This directive also includes provisions for the disclosure of evidence related to high-risk AI systems, which could impact IP rights and responsibilities.

WIPO Treaties

The World Intellectual Property Organization (WIPO) has been actively engaged in discussions about the intersection of AI and IP. Various treaties and guidelines developed by WIPO aim to address the challenges posed by AI in relation to copyright, patentability, and the protection of trade secrets. WIPO's ongoing work includes examining how existing IP frameworks can be adapted to better accommodate AI-generated works.

Bletchley Declaration

In November 2023, representatives from multiple countries, including the EU and the U.S., signed the Bletchley Declaration, which emphasizes the need for trustworthy AI and recognizes the importance of IP rights in the context of AI development. This declaration calls for international cooperation to address the unique challenges posed by AI technologies.

General Data Protection Regulation (GDPR)

While primarily focused on data protection, the GDPR has implications for IP, especially concerning the use of personal data in AI training. The regulation ensures that data privacy rights are respected, which intersects with IP rights when considering the ownership and use of datasets in AI applications. These frameworks and treaties highlight the evolving landscape of IP protection in the context of AI, emphasizing the need for robust legal structures to safeguard innovation while addressing the unique challenges posed by AI technologies.

Previous Attempts to Solve the Issue

Due to the emerging nature of AI, very little has been done so far to address this issue and most solutions not already mentioned are far from implementation. As a result, this topic prompts the creation of a new landmark solution to the issue.

Possible Solutions

Encouraging domestic auditing amongst AI-engaged nations

Due to the differences in copyright and IP law amongst nations, something like a convention might not be very compatible with every nation, especially those whose law in this realm and involvement in the rise of AI in general is not significantly developed. Instead, major players in the AI space could be made to audit AI training material in AI companies on their territory to ensure that works falling under copyright are not included in the training material. All nations could then contribute by providing data on copyrighted works originating from their territory such that AI developed or used there does not violate copyright. This solution would create a regime of AI regulation which may be appealing to nations looking to advance AI with caution, gives copyright holders the opportunity to declare their work, and can leverage existing copyright databases. However, because the solution can only ever be a suggestion to avoid overstepping sovereignty, it may not see the widespread adoption necessary for it to have a major effect.

Creating a unified training material database for AI models

One of the primary reasons that AI models end up using copyrighted work is because large databases are often imported into training material without scrupulous examination of that data for IP. A solution for this could be to create a continually maintained and updated database of certifiably copyright-free material which can be used for training AI models. This ensures copyright is respected while simultaneously opening the doors to further development of AI by more and more nations and companies around the world. This solution satisfies the urges of many stakeholders in the AI industry to approach AI with caution by agreeing upon limitations for training data, enables otherwise incapable countries and companies to jumpstart AI development using globally standardized training material, and is compatible with potential clauses that create or improve fora of international discussion on AI since this solution would require international contribution. However, it could be argued that this would stifle the overall diversity of AI models that naturally occur with different training data, stifling competition between companies and nations overall.

Pushing for legislative revision in copyright law

Again owing to the recency of AI, most nations have no established law surrounding the authorship of AI-generated works, and therefore no means of determining the holder of IPRs. Therefore, a resolution could create a standard for domestic legislation that addresses this vagueness and definitively sets out the distribution of rights in these cases. This solution can act as a failsafe if other solutions fail or to supplement others, and due to a lack of existing action at a national level, it will likely not be directly opposed by many delegates' stances if it is made reasonably agreeable. However, this solution can only make a standard that nations can adhere to, rather than a set of laws that countries must implement since that would violate sovereignty.

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