



RESEARCH ARTICLE

AI-Generated Contents: Blurring the Lines of Copyright OwnershipIrene Xin Hui Ling¹, Chuin-Loong Tan², Eng Siang Tay^{3*}^{1,2,3} Faculty of Law, Multimedia University, Jalan Ayer Keroh Lama, 75450 Melaka, Malaysia**ARTICLE INFO**

Received: Oct 2, 2024

Accepted: Nov 15, 2024

Keywords

AI-Generated Contents

Artificial Intelligence

Authorship

Copyright

Ownership

ABSTRACT

The advent of sophisticated Artificial Intelligence ('AI') technology in the 21st century, with the ability to simulate the cognitive aspects of human thinking to generate original content, has changed the conventional method of creation that was predominantly driven by humans. This transformation has sparked a legal debate as to the enforcement of copyright laws. It seems that granting ownership right in an AI-generated work has become less straightforward as it used to be, where the lines of authorship have been blurred with the contribution of non-human creation. Simultaneously, the assignment of copyright ownership has significant implications on a larger scale as it corresponds to the economic right and dealing of the creation itself. Unlike the United Kingdom which has incorporated the concept of AI-generated work in its copyright laws, this matter is still a grey area in Malaysia. Therefore, there is an urgent need for Malaysia to integrate AI applications into its existing copyright legislation. This paper seeks to explore the copyrightability of works created by AI in Malaysia under the existing legislation by dissecting the legal challenges posed by the AI-generated contents over the ownership of copyright. Besides, a doctrinal approach was utilised to prepare this paper by conducting comparative analysis to examine how this issue has been addressed by the courts across different jurisdictions. It also highlights some recommendations for Malaysia to address these emerging challenges in order to strike a balance between promoting the use of AI technology and protecting the intangible creations of the human intellect.

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1. INTRODUCTION

With the rapid evolution of technological advancement, the rise of Artificial Intelligence ('AI') has forever transformed the landscape of the 21st century. The emergence of Generative AI enables machines to perform creative tasks independently, including complex functions such as software development and artistic endeavours (Zhang, 2024). The lines of the copyright ownership will get blurry in a collaboration between a human and a machine due to the uncertainty in the authorship, which is the determining factor of the copyright ownership. As such, the existence of AI-generated work has sparked a huge wave of debates associated with the copyright protection for the outputs of AI.

2. MATERIALS AND METHODS

The research method employed in this paper is mainly doctrinal in nature by delving into the intricacies of the AI-generated contents and its implications on the copyright laws in Malaysia. A library-based analysis has been conducted to study the relevant laws and articles in evaluating the copyright status of AI-generated contents under the existing Malaysian legal framework. Furthermore, a comparative analysis has been conducted to study the copyright landscape for AI-generated contents by referring to the court decisions concerning the Device for the Autonomous Bootstrapping of Unified Sentience ('DABUS') across different jurisdictions to propose several recommendations for Malaysia to address the emerging copyright issues of the AI-generated works.

3. RESULTS

Based on the doctrinal legal research, the results show that the current legal status of AI in the field of copyright in Malaysia still remains unknown because the existing copyright law in Malaysia does not cater to this area despite the rise of AI as the cutting-edge technological battleground globally.

Furthermore, by examining court decisions across various jurisdictions regarding DABUS as a reference for Malaysia in the progress of developing its own legislation governing AI regulation, different stances can be seen on the copyrightability of AI-created outputs. For instance, the courts in the United States, United Kingdom, Australia still remain on the position that there must be personal input of a human author in the original work, which excludes the possibility of recognising the AI-generated contents under copyright protection. On the other hand, China has moved forward and widened the definition of 'work' to include original intellectual achievements in the creation of works.

4. DISCUSSION

An important feature of AI-generated works is that although the human programmers are capable of setting the parameters of the output, the AI programs are the one that autonomously generate the final creation (Appel et al., 2023). The non-human autonomy in the creation of work has raised legal ambiguity as to the authorship of the original work, hence posing uncertainty on the copyright ownership of the AI-generated contents.

4.1 Authorship of AI-generated contents

In terms of Malaysian legal framework, section 3 of the Copyright Act 1987 ('CA 1987') defines 'author' as the maker of the work, which does not seem to extend to the non-human creators. However, a contrasting view can be seen in section 3 of the CA 1987 by interpreting the term 'qualified person' under section 10(1) of the CA 1987 to include both individual and a body corporate. This interpretation was further supported in the case of *Creative Purpose Sdn Bhd & Anor v Integrated Trans Corp Sdn Bhd & Ors* (1997), where Kamalanathan Ratnam JC held that if a 'qualified person' for an 'author' includes a body corporate, it would be correct to read the word 'author' to include both natural person and body corporate in any other provision of the CA 1987.

Nevertheless, this interpretation is inconsistent with section 17 of the CA 1987, namely the duration of copyright, which is expressly provided to be during the life of the author which continues until the expiry of fifty years after his death. Clearly this copyright duration does not consider the situation where a body corporate is the author of the work. In this case, copyright may subsist in the work forever as long as the company is not dissolved. This situation is undesirable as limiting access to the copyrighted work could hinder the free dissemination of knowledge and information (Sik, 2018).

Based on the existing provisions, it is reasonable to say that the creator, AI itself, as neither a natural person nor a body corporate, is not considered as a 'qualified person' under the CA 1987. Therefore, an AI program shall not be considered as an 'author' until the current CA 1987 has been revised.

4.2 Comparative analysis across various jurisdictions on copyright of AI-Generated content

The case of DABUS, a creativity engine that uses artificial neural networks to generate and assess new ideas, has sparked a significant legal debate across various jurisdictions regarding the grant of copyright protection towards AI-generated content. The controversy centers on Stephen Thaler's efforts to secure copyright protection and patent for inventions generated by DABUS, leading to a mixed bag of outcomes that highlight the complexities and divergences in international intellectual property law concerning AI-generated inventions.

(a) United States ('US')

Thaler's copyright applications on DABUS's visual art creation, namely "A Recent Entrance to Paradise" were rejected by the US Copyright Office based on the ground that the work did not have the necessary human authorship for a copyright claim, because copyright law is applicable only to works created by humans. With dissatisfaction, Thaler filed a legal action against Shira Perlmutter, Register of Copyrights and Director of the United States Copyright Office (*Thaler v. Perlmutter*, 2023).

On 18th August 2023, the District Judge, Beryl Howell ruled that under the US Copyright Act 1976, any art produced solely by AI, without any human contribution, is ineligible for copyright protection because the requirement of human authorship is a prerequisite to copyright eligibility. This court's ruling aligns with the principle that copyright is only reserved for works authored by humans, which is in line with the current approach taken by Malaysian framework in copyright protection which mandates human participation to warrant copyright protection. Subsequently, Thaler also appealed to the U.S. Court of Appeals for the Federal Circuit which affirmed Judge Howell's decision.

(b) United Kingdom ('UK')

Thaler's patent application for DABUS was rejected by the UK Intellectual Property Office because section 9(3) of the Copyright, Designs, and Patents Act 1988 clearly states that an inventor must be a human being, which cannot be fulfilled by AI. This decision was challenged in the High Court, where Justice Smith dismissed the appeal by concluding that the law was unequivocal in requiring an inventor to be a person under the existing legal framework (*Thaler v Comptroller-General of Patents, Designs and Trade Marks*, 2020).

In affirming the High Court judgment, the Court of Appeal judges, including Arnold, Laing, and Birss, concurred that the inventor must indeed be a person (*Thaler v Comptroller-General of Patents, Designs and Trade Marks*, 2021). However, their opinions differed on whether Thaler's applications have met the statutory requirements. It was suggested in the minority decision by Birss LJ that the IPO is not obligated to delve into the specifics of inventorship and patent entitlement, implying that AI-generated inventions might be patentable under different circumstances. Regardless, the majority held that the current law does not accommodate AI as an inventor, echoing the principle that an inventor must be a natural person. This decision was then upheld by the Supreme Court (*Thaler v Comptroller-General of Patents, Designs and Trade Marks*, 2023). Although the rulings in the UK are concerned with patent application, the same rationale applies to the copyright protection, which requires a creation by a natural person.

(c) Australia

Like the UK, the Australian Patent Office also rejected Thaler's patent applications, which led to the Federal Court case of *Thaler v Commissioner of Patents* (2021). Justice Jonathan Beach delivered a landmark judgment in favour of Thaler, interpreting the Patent Act 1990 not to expressly exclude non-human entities as inventors. Beach J elucidated that while an AI system could indeed be considered an inventor, it could not apply for a patent protection, aligning this stance with the technological realities and the intent of the Act to foster innovation. This ruling represented the first of its kind, acknowledging an AI machine's capacity to be named as an inventor in a patent application. Similarly, it seems that there is a silver lining in the recognition of copyright protection on AI-generated contents.

However, the Australian Patent Office appealed against this decision, emphasising that their action did not reflect a broader governmental policy on AI's inventorship potential but was a move to safeguard the interests of Australian innovators in line with the country's AI action plan announced in June 2021. Subsequently, on April 13, 2022, a unanimous decision of the full bench, consisting of five Federal Court judges sided with IP Australia, overturning the initial ruling by Beach J (*Commissioner of Patents v Thaler*, 2022). The court suggested that the matter has raised significant policy questions regarding AI's role in the patent system, which requires careful consideration by lawmakers. With the decisions of the Federal Court, Thaler's attempt to take the matter to the High Court was ultimately unsuccessful, as his application for special leave to appeal was rejected in November 2022, concluding his legal pursuit regarding patent and copyright application in Australia.

(d) China

Although Thaler did not apply patent and copyright applications for DABUS in China, it is worth noting that China is one of the countries to recognise the copyright protection for AI-generated content. Since this issue is silent in Article 3 of the Copyright Law of the People's Republic of China ('CLPRC') relating to copyright eligibility for AI-generated content, the question of whether AI-generated content is qualified as a work under copyright laws remains undefined in regulations, leaving it to judicial interpretation. Initially, Chinese courts aligned with the international stance,

generally denying copyright to AI creations, as seen in the case of *Beijing Film Law Firm v Beijing Baidu Netcom Science & Technology Co Ltd* (2018), which held that under the CLPRC, only works created by natural persons qualify for copyright protection.

In the case of *Shenzhen Tencent Computer System Co Ltd v Shanghai Yingxun Technology Co Ltd* (2019), the Nanshan District Court of Shenzhen set a precedent in China by ruling that AI-generated outputs could receive copyright protection. The court recognised that Tencent's involvement in the Dreamwriter software's creation, through specific choices in data input and writing styles, has produced articles involving human creativity and judgment, which were deemed protectable under copyright law as literary works.

After *Tencent's* case, Article 3 of CLPRC was amended in 2021 which provides a broader definition of "works" as original intellectual achievements in literature, art, and science, capable of being expressed in certain forms. This amendment does not explicitly include AI-generated works as protectable content unless they have fulfilled existing criteria for copyrightable works. Thus, it seems that China's stance suggests that AI-generated works, to some extent, can be protected under the existing copyright framework without requiring significant legal overhaul (Dai & Jin, 2021).

4.3 The way forward

The Ministry of Science, Technology and Innovation (MOSTI) has launched the National Artificial Intelligence Roadmap from the year of 2021 to 2025 (Malaysia Ministry of Science, Technology and Innovation, 2021). Furthermore, the Minister of MOSTI, Chang Lih Kang, has announced the intention of drafting a comprehensive AI Bill, (Bernama, 2023) to cover a range of issues including intellectual property, data privacy, promoting transparency and accountability, and addressing cybersecurity concerns.

Since the AI Bill in Malaysia is still in the drafting process, the question of whether AI-generated works are safeguarded by the CA 1987 remains a grey area. However, based on the existing CA 1987, it seems that Malaysian stance is similar to US, UK and Australia, which limits the copyright protection to human investors. Therefore, until and unless the current CA 1987 has been revised to expressly cater copyright protection in the AI-generated works, this issue is still unclear.

It is suggested that Malaysia could take a stance similar with China by granting the copyright protection as long originality can be found in the AI-generated works. This stance is perfectly aligned with section 7 of the CA 1987 which requires the expenditure of sufficient effort to fulfil originality of the work.

5. CONCLUSION

It is undeniable that a wave of AI has swept the entire modern society, which has created another way of work creation. The rapid evolution of AI has sparked a legal challenge to the copyright of AI-generated content due to the ambiguity regarding human contribution and intentions. Unfortunately, at present, Malaysia has yet to catch up in terms of regulations as there is currently still no copyright law in place to address the emerging issues relating to AI, particularly on the copyrightability of AI-generated contents. Therefore, it is high time for Malaysia to revisit its current legal framework to keep pace with the developments in media and technology, which continue to be a dynamic and evolving field. Perhaps it is highly recommended to consider the approach adopted by China to recognise the copyright protection for original AI-generated content.

Authors' contributions: All the authors have contributed to the accomplishment of this paper in terms of the discussion on idea formulation, data acquisition, data analysis, data interpretation of data, writing and final editing.

Acknowledgement: The authors would like to thank Siti Hasmah Digital Library of Multimedia University for the access of resources in the completion of this paper.

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