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# **EXAMINATION OF THE OWNERSHIP OF INTELLECTUAL PROPERTY**

# RIGHTS IN ARTIFICIAL INTELLIGENCE GENERATED DOCUMENTS.

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#### **Abstract**

The modern-day reality is that the world has seen unprecedented evolution in information technology and artificial intelligence. In the opinion of theorist of technological convergence, the acceptance of information technology has become necessary as almost every facet of life revolves around it. In fact, technological determinism posits that advanced technology is taking over the entire landscape of human existence, including learning and research. This is buttressed by the evolution of Artificial Intelligence (AI) tools that aid in research, writing and referencing. The evolution of these AI tools necessitates a conversation about the ownership and protection of Intellectual Property Rights (IPRs) in materials generated using these AI tools. It has also become important to define what amounts to infringements of these IPRs, at what point an infringement could be stated to have occurred and who would be held liable for such infringements.

This paper adopts the doctrinal research methodology to analyse primary and secondary sources of data in order to determine the issues of ownership and protection of IPRs emanating from the use of AI tools for research. It submits that the use of AI tools in research presents some fresh problems for Intellectual Property (IP) protection and enforcement which should be addressed through making amendment to existing IP laws in Nigeria. The study concludes by making recommendations on how to fortify our existing legal regimes and weed out loopholes that can be exploited to successfully infringe on the rights of AI generated IPRs holders.

**Key Words**: Artificial Intelligence, Intellectual Property and Intellectual Property Rights

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#### 1.0 INTRODUCTION

IPRs are rights granted to owners of IP to enable them derive both moral and financial benefits of their creative and innovative work. In this century, the use of computer has developed from the conventional use which involves a lot of human input to a situation where the computer has tools that does not need so much input from human beings for them to make work easier. It is a world of AI where computer programs are being created to carry out intelligent work. Researchers benefit greatly from the use of these AI tools. Some of these tools are used to proofread documents and generate information needed by researchers, while some are used to even generate a first draft of document that the researcher will align to the topic he intends to write about. The question which comes to mind is who can claim ownership of these AI generated documents? Is it the creator of the AI tool? Or the person who utilized the tool? This paper seeks to examine the ownership of IPRs in AI generated documents and who can enforce the IPRs.

This paper is divided into three sections. The first part will do a conceptual clarification of AI, IP and IPR. The second part will examine the connection between AI and IPRs with particular attention to the right of ownership of IP in AI generated documents. The third section will discuss the legal protection for IPRS in AI generated document and the challenges of protecting AI generated documents. This paper will undertake a doctrinal approach to give a proper analysis of the topic.

#### 2.0 ARTIFICIAL INTELLIGENCE

Artificial Intelligence (AI) is a branch of computer science<sup>1</sup> and it is sometimes called machine intelligence.<sup>2</sup> AI was introduced by Alan Mathison Turing<sup>3</sup> in 1935.<sup>4</sup> It "involves developing

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<sup>&</sup>lt;sup>1</sup> Margaret Rouse, 'What Does Artificial Intelligence (AI) Mean?' *Technopedia* (23 November 2023) <a href="https://www.techopedia.com/definition/190/artificial-intelligence-ai">https://www.techopedia.com/definition/190/artificial-intelligence-ai</a> accessed 24 November 2023.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> A British logician and computer pioneer.

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computer programs to complete tasks which would otherwise require human intelligence."<sup>5</sup> AI uses various algorithms which assist with learning, solving-problems, writing, research, language understanding and logical reasoning.<sup>6</sup>

## AI has also been defined as

the ability of machine systems to acquire and apply knowledge, and to carryout intelligent behaviour. This includes a variety of cognitive tasks (e.g sensing, processing, oral language, reasoning, learning and making decisions) and ability to move and manipulate objects accordingly.<sup>7</sup>

# AI has the following characteristics:

- 1. It can make deductions from provided information and predict what the user needs.
- 2. It can make decisions by itself.
- 3. It can use algorithms to improve itself and do a task better and faster than human beings.

#### Types of AI

# There are two major types of AI:

- 1. Narrow or Weak AI: just as the name implies, it is AI that is designed to perform a specific task such as an AI for conducting internet searches.
- 2. Functionality Based AI: this type of AI is built to work in a particular mode and can carry out various tasks. Examples of such AI include: Reactive AI, Limited memory AI and elf-aware machines.

<sup>&</sup>lt;sup>4</sup> Britannica, 'Alan Turing and the beginning of AI' <a href="https://www.britannica.com/technology/artificial-intelligence/Alan-Turing-and-the-beginning-of-AI">https://www.britannica.com/technology/artificial-intelligence/Alan-Turing-and-the-beginning-of-AI</a> accessed 24 November 2023.

<sup>&</sup>lt;sup>5</sup> Ziyad Mohamed Saleh, 'Artificial Intelligence Definition, Ethics and Standards, The British University in Egypt 2019' <a href="https://www.wathi.org/artificial-intelligence-definition-ethics-and-standards-the-british-university-in-egypt-2019/">https://www.wathi.org/artificial-intelligence-definition-ethics-and-standards-the-british-university-in-egypt-2019/</a> > accessed 20 November 2023.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Mohamed M El Hadi, Artificial Intelligence Background, Definitions, Challenges and Benefits' *CompuNet* (May 2023) <a href="https://jstc.journals.ekb.eg/article\_297957\_18c63823bf45bdd85ffd54bf0dafa8f5.pdf">https://jstc.journals.ekb.eg/article\_297957\_18c63823bf45bdd85ffd54bf0dafa8f5.pdf</a> > accessed 20 November 2023.

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In the academic world, AI is present and assisting researchers to conduct easier and faster research. AI through the use of algorithms and data analytics helps researchers to process large data, do literature review, scan relevant information from several articles, accelerate the discovery of research gaps and enhance the quality of research.<sup>8</sup> Examples of AI used for academic research are Generative AI such as ChatGPT and DALL-E which help researchers with first drafts of their article; PDF reader such as PDFgear that extracts key information needed by the researcher such as; AI such as Consensus that can be used to scan articles and extract conclusions tailored towards a researcher's request; AI such as SCITE, Elicit and OpenRead which provides researchers with materials related to their field of study; lastly AI such as Trinka that help researchers to check use of language and help to check for plagiarism.<sup>9</sup>

#### 2.1INTELLECTUAL PROPERTY

IP has been defined by the World Intellectual Property Organisation (WIPO) as "creations of the mind-everything from works of art to inventions, computer programs to trademarks and other commercial signs." It is "someone's idea, invention, creation and so on that can be protected by law from being copied by someone else." It has also been defined as "set of intangible assets owned and legally protected by a company or individual from outside use or implementation without consent." Some authors have defined IP based on the rights conferred on the owners of works that are creations of the mind. Oriakhogba and Olubiyi defined IP as a "right conferred by law on human innovators and creators, and even entrepreneurs to protect the fruits or products of their intellect, their innovative and creative efforts and their commercial reputation and

<sup>&</sup>lt;sup>8</sup> Jessica Abbadia, 'Exploring the Role of AI in Academic Research' *mind the graph* (27 June 2023) <a href="https://mindthegraph.com/blog/ai-in-academic-research/">https://mindthegraph.com/blog/ai-in-academic-research/</a> > accessed 20 November 2023.

<sup>&</sup>lt;sup>9</sup> Harshini, 'Top 10 AI Tools for Academic Research' *Analytics Insight* (23 April 2023) < https://www.analyticsinsight.net/top-10-ai-tools-for-academic-research/> accessed 22 November 2023.

World Intellectual Property Organisation (WIPO), 'What is Intellectual Property' <a href="https://www.wipo.int/edocs/pubdocs/en/wipo">https://www.wipo.int/edocs/pubdocs/en/wipo</a> pub 450 2020.pdf > accessed 23 November 2023.

<sup>&</sup>lt;sup>11</sup> Cambridge Dictionary, 'Intellectual Property' <a href="https://dictionary.cambridge.org/dictionary/english/intellectual-property">https://dictionary.cambridge.org/dictionary/english/intellectual-property</a> > accessed 23 November 2023.

Will Kenton, 'What is Intellectual Property and What are Some Types' Investopedia, October 6, 2023 <a href="https://www.investopedia.com/terms/i/intellectualproperty.asp">https://www.investopedia.com/terms/i/intellectualproperty.asp</a> accessed 22 November 2023

Examination of the Ownership of Intellectual Property Rights in Artificial Intelligence Generated Documents. <a href="https://doi.org/10.53982/alj.2024.1201.10-j">https://doi.org/10.53982/alj.2024.1201.10-j</a>

goodwill."<sup>13</sup> Adewopo stated that "the expression Intellectual Property is...taken to mean the legal rights which may be asserted in respect of the product of the human intellect. That is the sum of a man in his intellect, which he holds as his birth right, that he is worthy of the product of his labour as a reward and incentive to further create and innovate for the benefit of the society.

These definitions suggest that just like land and car, there are certain properties that stem from the intellect of humans. These properties are called Intellectual properties. They are grouped as intangible properties because they come from the minds of the creator and cannot be seen. However, for them to attributed legal protection they must be expressed in a form that can be seen and used by others. The owners of these IPs then enjoy certain legal rights in the expression of their IP. Also, from the various definitions offered above, it can be deduced that IP is a personal right enjoined by people who have produced original innovative and creative works. These works could be in form of written works or films, or products or even new mechanisms of doing a thing. All that matters is that IP is the reward for people's creative minds. IP can be used like every other type of Property. The owner of the IP can issue licenses to others to explore the IP, such person can also transfer the rights to other people. <sup>15</sup> There are several types of Intellectual Property Rights such as copyright, patent, designs, trademarks, trade secret and geographical indications among others. For the purpose of this paper Copyright will be examined.

Copyrights are "exclusive rights conferred in respect of creative works, such as books and other literary works, music and artistic works on the authors of the works, usually for a period including the life of the author plus seventy or fifty years after the author's death."<sup>16</sup> The works that can be protected under copyright include but are not limited to novels, newspapers,

<sup>&</sup>lt;sup>13</sup> Desmond O Oriakhogba and Ifeoluwa A Olubiyi, *Intellectual Property Law in Nigeria: Emerging Trends, Theories and Practice* (2021, Paclerd Press Ltd Benin) 2.

<sup>&</sup>lt;sup>14</sup> A Adewopo, According to Intellectual Property: A Pro-Development Vision of The Law and the Nigerian Intellectual Property Law and Policy Reform in the Knowledge Era (NIALS, 2012).

<sup>&</sup>lt;sup>15</sup> Such as employees transferring their IP rights to their employers through a contract.

<sup>&</sup>lt;sup>16</sup> Oriakhogba and Olubiyi (n13) 6.

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computer programs, music, painting, photographs and so on. Copyright does not require registration to be protected. It is conferred on the author automatically.<sup>17</sup>

The law that protects rights of owners of Copyrights in Nigeria is the Copyright Act 2023 (CRA 2022). It repealed the old Copyright Act that was enacted in 1988. The Act makes provision for works that are eligible for copyright in Nigeria. They are: literary works, musical works, artistic works, audio visuals, sounding recordings, broadcasts which has been fixed in any medium of expression and the owner of the work has expanded some effort on making the work original. It introduced the protection of online contents. The owners of copyright works have duration within which they can claim rights under a particular work. For literary works, musical works and artistic works other than photographs, the duration of the copyright is 70 years after authors death. For works made under government control by government agency or by a prescribed international body the duration of the copyright is 50 years from the date the work was created. For copyright in anonymous or pseudonymous literary, musical or artistic works the duration is 70 years after the work was made. The duration for copyrights in audiovisuals works and photographs, sound recording and broadcasts is 50 years after the wok was made.

#### 2.2 INTELLECTUAL PROPERTY RIGHTS

Intellectual Property Rights are "legal rights given to the inventor or creator to protect his invention or creation for a certain period of time." They can be classified into two economic right and moral right.

## **Economic Right**

<sup>&</sup>lt;sup>17</sup> Copyright Act 2023 (CRA 2023) Section 14.

<sup>&</sup>lt;sup>18</sup> CRA 2023 Section 2.

<sup>&</sup>lt;sup>19</sup> CRA 2023 Part VII.

<sup>&</sup>lt;sup>20</sup> CRA 2023 Section 19.

<sup>&</sup>lt;sup>21</sup> Chandra Nath Saha and Sanjib Bhatacharya, 'Intellectual Property Rights: An Overview and Implications in Pharmaceutical Industry' [2011] 2(2) Journal of Advanced Pharmaceutical Technology Research 89.

Examination of the Ownership of Intellectual Property Rights in Artificial Intelligence Generated Documents. https://doi.org/10.53982/alj.2024.1201.10-j

Economic right in IP involves the financial gains that IP right holders enjoy when their works are utilized by others. 22 Like every other property (where owners decide how they want their properties to be used while ensuring that they are put to legal use), IPRs holders are at liberty to make decisions on who can use their IP and who to what extent their IP can be used by people. The permission of an IPR holder is required before their IP can be used. They have the rights to enjoy all benefits that accrue form the use of their IP. The Economic rights of IPRs holders stem from the believe that holders of IPRs should also enjoy economic benefits of their works because intellectual works are socially beneficial.<sup>23</sup> They are works that the public benefit from and as such users of such works should make payment for the value they get from such works. Right holders have a right to adequate renumeration for their immense contribution to societal growth through their innovative creations. Lack of adequate remuneration can discourage right holders and lead to reduced innovative creation or creation of substandard intellectual work. Therefore, IP laws ensure that right holders enjoy maximum financial benefits of their works and that their rights are not exploited without their permission. IP laws achieve this by vesting exclusive rights to enjoy the fruits of their creativity and innovation on creators and innovators. Examples of economic rights of IPR holders are: right to solely distribute copies of the work, right to authorise broadcast of the work publicly and the right to grant permission to others to translate the work into other languages among others.

## **Moral Right**

Moral rights grants IP owners the right to preserve and protect their authorship link to their works. Author's moral rights generates from the natural rights of the holders. Natural rights are inherent rights that an IPR holder enjoys by virtue of being the owner of an IP. This right is inalienable and the IP owner enjoys it automatically by creating it. This right has two branches,

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WIPO, 'Understanding Copyright and Related Rights' (2016) <a href="https://www.wipo.int/edocs/pubdocs/en/wipo">https://www.wipo.int/edocs/pubdocs/en/wipo</a> pub 909 2016.pdf > accessed 22 November 2023 10.

<sup>&</sup>lt;sup>23</sup> Oriakhogba and Olubiyi (n13) 9.

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the right of attribution and the integrity right.<sup>24</sup> The right of attribution known as paternity right refers to the right of the IPR holder to claim authorship of their work.<sup>25</sup> The integrity right allows the author to prevent unapproved changes to their work and to prevent anyone from making changes that are prejudicial to the reputation of the owner of the work. Natural rights are IP rights have been considered a natural right because of its inalienable nature. Moral right is independent of economic right and should not be transferred to another<sup>26</sup> but it can be waived by agreement.<sup>27</sup> Examples of moral rights are: the right to be associated with the work as its creator, the right to decide as a creator to remain anonymous and the right to prevent alterations that can affect the reputation of the creator among others.<sup>28</sup>

#### 2.3 INFRINGEMENTS OF INTELLECTUAL PROPERTY RIGHTS

IP infringement occurs when works under the protection of IP laws are copied without the permission of the IPRs holder or in a manner that prejudices the rights of the owner of the IP. <sup>29</sup> Globally, there are two types of IP Infringement. The Primary Infringement and the Secondary infringement.

Primary Infringement: a person's act of infringement falls within primary infringement and attracts strict liability when there is no need for the infringer to have prior knowledge of ownership of the IP or intention to extort the right holder. Example of such is Copying of Copyright works or issuing copies of pirated copyright works.

Secondary Infringement: An act will fall under the secondary infringement where the infringer is expected to have specific knowledge of ownership of the IP or a reasonable ground for having

<sup>2727</sup> York University, 'What Rights are Protected by Copyright Law' <a href="https://copyright.info.yorku.ca/what-rights-are-protected-by-copyright-law/">https://copyright.info.yorku.ca/what-rights-are-protected-by-copyright-law/<a href="https://copyright-law/">accessed 23 November 2023.</a>
<sup>28</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Article 6b The Berne Convention

<sup>&</sup>lt;sup>25</sup> Oriakhogba and Olubiyi (n13) 10.

<sup>&</sup>lt;sup>26</sup> WIPO, (n22) 14.

<sup>&</sup>lt;sup>29</sup> EM Law, 'Infringement of Intellectual Property Rights' <a href="https://emlaw.co.uk/dispute-resolution-solicitors/infringement-of-intellectual-property-rights/">https://emlaw.co.uk/dispute-resolution-solicitors/infringement-of-intellectual-property-rights/</a> accessed 22 November 2023.

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such knowledge at the time of the offence. Examples selling, letting for hire, offering or exposing a pirated copy/infringing copy of a work for sale, distributing an infringing copy of a work, transmitting a copyright work publicly.

Section 36 of the CRA 2022 makes provision for acts which amount to infringement of copyrights. Someone who does any of the following is a copyright infringer:

- a. causes a person to violate IPRs of another.
- b. imports or causes the importation of copied work to Nigeria
- c. Sells or offers for sale a copyright work
- d. Permits within its premises, the reproduction of a copyright work
- e. Makes or has in his possession infringing copies of works

However, Section 20 makes provision for exemption to acts that amounts to infringement of copyrights. One of these exceptions is fair dealing. Fair dealing relates to the appropriate use of other people's IP without infringing on their IPRs. The act provides that to determine fair dealing, the following factors should be considered.<sup>30</sup>

- a. The purpose and characters of the usage.
- b. The nature of the work.
- c. The amount and sustainability of the portion used in relation to the work as a whole.

Therefore, where a person uses part of a copyright holder's work for a research and acknowledges the person duly, that person has not infringed on the right of the copyright holder. That use will fall under the "fair dealing" exception. Other uses of IP that falls under fair dealing are: works used for non-commercial purpose which duly acknowledges the right holder, works used for private study, parody, satire, pastiche and so on which also acknowledges the actual right holder. Section 37 provides that acts of infringements of copyrights are actionable in court at the instance of the pioneer, assignee or an exclusive licensee of the copyright. This means that only right holders, their assignees and licensees can bring action for infringement of their

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<sup>&</sup>lt;sup>30</sup> Section 20 (1) CRA.

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copyrights. Section 44 makes provision for punishment for infringement of copyrights in Nigeria. For people who make, sell or cause to distribute copied works, they shall be liable to pay N10,000 fine per copy or at least 5years imprisonment. While people who cause the transmission of a copied work to be transmitted through a wired or wireless platform will be liable to fine of N1000000 or five years imprisonment. This punishment is more deserving and realistic. As opposed to previous provision in the old Copyright Act 1988 that makes provision for ridiculously low fines.

# 3.0 INTELLECTUAL PROPERTY RIGHTS AND ARTIFICIAL INTELLIGENCE GENERATED DOCUMENTS

The most relevant part of IP with reference to AI generated document is copyright. As stated earlier, copyright entails authorship and ownership. In this section, this paper will dissect the issues relating to ownership and protection of copyright in artificial intelligence generated document.

The use of computer to generate work is not new, in fact, use of computer programs in the generation of copyrighted works have been the norm in many countries since the 1970s. While the computer-generated works did not have much issues relating to copyright ownership early on, new innovation has necessitated a review of the legal landscape on this matter in light of the new issues like. In order to understand the reasons for the new issues, a distinction must therefore be drawn from the use of computers to generate work and the use of AI in generating work by authors. On the one hand, computer programs were regarded merely as tools to support the activities which were inherently creative in nature. The implication of this is that human intervention was still a major driver of the creative process and an essential requirement for productivity. The computer tools were seen in the same light as stationery items that still required natural beings to utilise them to create works. On the other hand, the advent of AI now means

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that computer programs have transcended the landscape of being mere tools in the creative process but now have the potential of independently generating works and even their own decisions. Presently, with the existence of AI tools such as ChatGPT from OpenAI and many others, AI has the potential to create an unprecedented amount of work within a very short span of time. With this innovation comes a new challenge especially for IP regimes because while it may be generally accepted that the works created by AI qualify for copyright in most jurisdictions as a consequence of its originality, the second leg of the criteria, for example as in the case of the Nigeria Copyright Act, is the requirement of use of "some effort" to give the work an original character<sup>31</sup>. This requirement can only be deemed to have been satisfied by virtue of the "programming and parameter on which such AI actually compiles and creates the work".<sup>32</sup>

The issue of authorship, which is one of the bedrocks of Copyright protection, has continued to be subject of intriguing discussion in almost all countries of the world. With respect to copyright Authorship in AI generated works; authors have recognized three distinct possibilities: (i) Copyright regimes should recognize authorship for AI; (ii) there should be no authorship in AI-generated documents and the work should fall into the "public domain"; and (iii) there should be sui generis law rather than copyright law to protect such works. Issues relating to these will be considered below:

## 3.1 Recognition of Authorship for AI

In the first instance, since copyright protection serves as an incentive for the production of more creative work by authors using their labour, skill and judgment, recognition of AI as an author and granting copyright to AI in the generated work would mean that "human creativity" can now also be equal to "machine creativity". Conversely, refusing copyright protection for AI generated work means that human creativity is preferred over machine creativity. Consequently, elevating

<sup>&</sup>lt;sup>31</sup> Copyright Act 2022 s.2(a)

<sup>&</sup>lt;sup>32</sup> Lucy Rana and Meril Mathew Joy, 'India: Artificial Intelligence And Copyright – The Authorship' *Mondaq* (18 December 2019) <a href="https://www.mondaq.com/india/copyright/876800/artificial-intelligence-andcopyright-the-authorship">https://www.mondaq.com/india/copyright/876800/artificial-intelligence-andcopyright-the-authorship</a> accessed 25 November 2023.

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machine creativity over human creativity or equating both may eventually lead to decline in human creative efforts. Furthermore, considering AI as an author of the Copyrighted work may have several unintended consequences; The work generated by AI may not be without flaws, in fact there is a potential for the work to contain languages that are biased, toxic and capable of leading to defamation, capable of incitement, against people of certain creed, ethnicity or beliefs or produce any other undesired result. In such cases, fixing issues such as liability, criminal or civil may be challenging because AI does not yet possess legal personality. The second issue is that of potential infringement. Who is held responsible in cases where there is evidence of Probative or Striking similarity between the work generated by AI and those that are already in existence. Further, if AI is treated as an author, it will still not be entitled to transfer ownership in the work, if it was not granted personhood. This is important because many civil law countries such as France, Germany, and Spain mandates that copyrighted work must bear the "imprint of the author's *personality*". Consequently, AI should be denied authorship in AI-generated works as AI does not have personality.<sup>33</sup> It should be noted that many countries are not in favour of granting AI any form of legal personality. This is because, granting AI personality means granting it all the attendant consequences of legal personalities such as capacity to enter into binding legal relationships with other persons and duties under the law making it liable of its acts or most importantly, it would then have the capacity "to sue and be sued" under the law.

The European Parliament has been advocating for the grant of some legal status of "electronic persons" to "autonomous robots" for the purposes of copyright protection.<sup>34</sup> The Artificial Intelligence Virtual Artist (AIVA) Technologies' "music composing AI becomes the first in the world to officially be given the status of a composer". This machine has been officially recognised and given the status of a composer by "SACEM, France and Luxembourg author's

<sup>&</sup>lt;sup>33</sup> Brigitte Vézina and Brent Moran, 'Artificial Intelligence and Creativity: Why We're against Copyright Protection for AI-Generated Output' *Creative Commons* (10 August 2020) <a href="https://creativecommons.org/2020/08/10/nocopyright-protection-for-ai-generated-output/">https://creativecommons.org/2020/08/10/nocopyright-protection-for-ai-generated-output/</a> accessed 23 November 2023.

<sup>&</sup>lt;sup>34</sup> 3 Edward Klaris and Alexia Bedat, 'Copyright Laws and Artificial Intelligence' *American Bar Association* (16 November 2017) <a href="https://www.americanbar.org/news/abanews/publications/youraba/2017/december-2017/copyright-laws-andartificial-intelligence/">https://www.americanbar.org/news/abanews/publications/youraba/2017/december-2017/copyright-laws-andartificial-intelligence/</a> accessed 23 November 2023.

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right society". This allows it to release music and receive royalties under the name AIVA.<sup>35</sup> It is also worthy of note that the Kingdom of Saudi Arabia granted citizenship to an AI "humanoid" robot, named Sophia in 2017.<sup>36</sup> Dr. David Hanson who created *Sophia* wrote in his paper—"Entering the Age of Living Intelligence Systems and Android Society" that with the pace at which AI is progressing, a tipping point where robots will rise and advocate for their rights to exist, to live free, and to evolve to their full potential" is likely.<sup>37</sup> This may mean they are likely to also claim IP protection with respect to "their" IPRs in works they create. In the words of Dr. David Hanson, "advanced robots will have the right to marry, own land and vote in general elections by 2045."<sup>38</sup> All these suggest that it will become possible for AI generated documents to be granted copyright.

As stated earlier, copyright laws of many countries also provide moral rights to the author, though this is not an obligation under the TRIPs Agreement.<sup>39</sup> Two moral rights – right of paternity; and right of integrity are routinely provided to the author of a copyrighted work. While the first ensures the right of the author to have his name associated with the work as creator every time the work is mentioned, the second enables the author to object to and make a claim for any mutilation or distortion of the work if that is prejudicial to their honour or reputation. The justification for this is the fact that moral rights of the author go to the very soul of copyrighted works and the author has a right to preserve, protect and nurture his creations through his moral rights". Moral rights are related to the feelings and emotions of the author, which is presumably human. These rights are not meant for AI or machine and it is doubtful if AI can claim these

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<sup>&</sup>lt;sup>35</sup> Ed Lauder, 'Aiva is the first AI to officially be Recognised as a Composer' *AI Business* (3 October 2017) <a href="https://aibusiness.com/document.asp?doc">https://aibusiness.com/document.asp?doc</a> id=760181> accessed 23 November 2023.

<sup>&</sup>lt;sup>36</sup> Parviainen, Jaana & Coeckelbergh, Mark. (2021). The Political Choreography of the Sophia Robot: Beyond Robot Rights and Citizenship to Political Performances for the Social Robotics Market. Al & Society. 36. 10.1007/s00146-020-01104-w.

<sup>&</sup>lt;sup>37</sup> Fredy Sánchez Merino, "Artificial Intelligence and a New Cornerstone for Authorship", WIPO-WTO Colloquium Papers, 2018, p. 28, 8

<sup>&</sup>lt;sup>38</sup> Anthony Cuthbertson, 'Robots will have Civil Rights by 2045, Claims Creator of 'I will Destroy Humans' Android' *Independent* (United Kingdom, 25 May 2018) <a href="https://www.independent.co.uk/life-style/gadgets-andtech/news/robots-civil-rights-android-artificial-intelligence-2045-destroy-humans-sophia-singularity-a8367331.html">https://www.independent.co.uk/life-style/gadgets-andtech/news/robots-civil-rights-android-artificial-intelligence-2045-destroy-humans-sophia-singularity-a8367331.html</a> accessed 23 November 2023.

<sup>&</sup>lt;sup>39</sup> Art. 9, Trade Related Aspect of Intellectual Property Rights

Examination of the Ownership of Intellectual Property Rights in Artificial Intelligence Generated Documents. <a href="https://doi.org/10.53982/alj.2024.1201.10-j">https://doi.org/10.53982/alj.2024.1201.10-j</a>

rights. AI is created by human beings, thus, any right granted to an AI is still indirectly granted to a human being. The fairness of such right granted to an individual through the AI generated work is worth questioning. As the creator of the AI did not create the document and should not enjoy moral rights from what he did not create.

Another complex situation will arise with the duration of copyright in AI generated documents because AI does not die like a human being. Though it can be argued that the terms of protection may be counted from the date of publication for a period of 50, 60 or 70 years depending upon the laws applicable in the country, In Nigeria, copyright in literary work lapses 70 years after the death of the right holder. This means that copyright in documents cannot endure in perpetuity. Hence, conferring copyright protection on AI with respect to AI-generated documents is disputed on the ground that unlike a human being that is mortal and experiences fatigue while working, AI does not die or experience fatigue. AI tools used to generate documents will be available from generation to generation provided internet still exists. Therefore, while a human author creates limited works in his/her lifetime in which a copyright subsists to enable him enjoy reward for his efforts; AI is immortal, does not experience fatigue and is capable of producing any number of works. Therefore, conferring copyright protection on AI-generated works is therefore "equivocal and disputable". 40 Furthermore, if AI tools are given the same input information over time, there's the potential that they will produce output that will be the same every time. Therefore, it cannot be safely said that the works are unique and creative. So, AI should not be granted copyright in documents generated from it.

The second view that has been canvassed on resolving the issues that emerges from the discussion is that the issue of authorship in AI-generated documents should be removed and thus the work should fall into the "public domain". There are several reasons put forward to justify this position. First, is it believed that in producing the work, AI has incurred no cost. Therefore, the issue of incentivizing AI for the "Sweat of its brows" does not come in at all. Secondly, AI has the capability of creating any number of duplications of work created by it at no extra cost or

<sup>&</sup>lt;sup>40</sup> Sik Cheng Peng, [2018] 'Artificial Intelligence and Copyright: The Author's Conundrum' WIPO-WTO Colloquium Papers, 181.

Examination of the Ownership of Intellectual Property Rights in Artificial Intelligence Generated Documents. <a href="https://doi.org/10.53982/alj.2024.1201.10-j">https://doi.org/10.53982/alj.2024.1201.10-j</a>

resources. It should, however, be considered that if no protection is granted to AI-generated works and the public is free to exploit the works without the need for authorization, the companies that have invested heavily in these AI tools may not be able to recoup their investment. Consequently, it may become necessary to offer some form of protection for these types of work so that AI programmers and companies will be provided with some form of incentives for their creation.

# The position in some jurisdictions

The UK Copyright, Designs and Patents Act, 1988 (CDPA) deals with computer-generated work. "Computer-generated" work is defined under CDPA to mean that "the work is generated by a computer in circumstances such that there is no human author of the work". 41 The reason for such a provision is "to create an exception to the requirement of human authorship in order to provide due recognition and protection for the work that goes into creating a program capable of independently generating works". 42 According to section 9(3) of the CDPA, the author in the case of a literary, dramatic, musical or artistic work which is computer-generated is to be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken. Andres Guadamuz disagreeing with the position states that authorship in such a case goes to the programmer and not to the user. He explains his position by giving the example of Microsoft which developed the computer program "Word" for the users to create their own works. He opines that Microsoft cannot have a copyright in a work which has been produced by the user with the help of that program. The copyright in the work so created will lie with the user of the program who will be recognized as the author because he/she created the work using that program. 43 In Express Newspapers plc v. Liverpool Daily Post & Echo, 44 the court considered computer as a tool in the same manner as a pen is regarded as a tool. Consequently, Creators of

<sup>&</sup>lt;sup>41</sup> UK Copyright, Designs and Patents Act, 1988 Section 178.

<sup>&</sup>lt;sup>42</sup> Nina Fitzgerald and Eoin Martyn, 'An In-depth Analysis of Copyright and the Challenges presented by Artificial Intelligence' *Ashurst's Website* (11 March 2020) <a href="https://www.ashurst.com/en/news-andinsights/insights/an-indepth-analysis-of-copyright-and-the-challenges-presented-by-artificial-intelligence/">https://www.ashurst.com/en/news-andinsights/insights/an-indepth-analysis-of-copyright-and-the-challenges-presented-by-artificial-intelligence/">https://www.ashurst.com/en/news-andinsights/insights/an-indepth-analysis-of-copyright-and-the-challenges-presented-by-artificial-intelligence/">https://www.ashurst.com/en/news-andinsights/insights/an-indepth-analysis-of-copyright-and-the-challenges-presented-by-artificial-intelligence/">https://www.ashurst.com/en/news-andinsights/insights/an-indepth-analysis-of-copyright-and-the-challenges-presented-by-artificial-intelligence/</a>

<sup>&</sup>lt;sup>44</sup> [1985] FSR 306.

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AI tools cannot be granted copyright in AI-generated documents because although they created the tool, they did not input the information that generated the document.

On the other hand, in the United States of America, copyright in a work can only be conferred on a human author and not on animals and machines. <sup>45</sup> The author of a document that was created with the help of an AI tool is the person who generated the document. The person is granted the copyright if they can establish that the AI tool was merely an instrument and a medium used in the creation of the work. <sup>46</sup>In the popular monkey selfie case, *Naruto v. Slater* <sup>47</sup>, where a money clicked a camera to take a selfie, the United States Court held that the monkey could not be said to be the author of the selfies as it would have been if it's a human being who took the photograph.

## 3.2 Considering AI and Human as Joint Authors

There have been calls in some circles to equate AI tools and Humans as joint authors in a copyrighted work so that they can both enjoy copyright protection. This suggestion, with due respect is flawed. The reason is that human beings have little or no control over the processes and procedure of AI. Most AI tools operate independently without much input from users, aside from inputting queries. Therefore, AI tools and Humans do not fit into the definition of "works of joint authorship" which is essentially defined Under the Nigerian Copyright as "a work produced by the collaboration of two or more authors in which the contributions of the authors are merged into an inseparable or interdependent part of a whole". Similarly, the Act recognises that persons shall be deemed to be co-owners of copyright if they share a joint interest in the whole or any part of a copyright or they have interests in the copyright in various works comprised in a production of two or more works.

For this option to be possible, there will be need to amend the copyright Act to redefine joint authorship. Beyond this, the problem identified earlier while discussing the possibility of

<sup>&</sup>lt;sup>45</sup> Kalin Hristov, "Artificial Intelligence and the Copyright Dilemma" [2017] 57(3) IDEA 435.

<sup>46</sup> Ibid.

<sup>&</sup>lt;sup>47</sup> 2016 U.S. Dist. Lexis 11041 (N. D. Cal. Jan. 23, 2016).

<sup>&</sup>lt;sup>48</sup> CRA 2023 Section 108.

Examination of the Ownership of Intellectual Property Rights in Artificial Intelligence Generated Documents. <a href="https://doi.org/10.53982/alj.2024.1201.10-j">https://doi.org/10.53982/alj.2024.1201.10-j</a>

granting AI authorship rights will still affect this option. AI unlike human being is immortal, it cannot claim rights by itself, it does not die and neither can it create the work without the input of a human being. We cannot equate AI to human beings, it is just a tool created for the use of human beings and awarding it copyrights would mean that every software can then argue that it is human too because they are being used by human beings.

# 3.3 Considering Sui Generis Regimes

The third option is to protect AI generated documents outside the conventional copyright system by adopting a sort of "sui generis" system. The exact parameters and extents of such protection will be defined and can differ from country to country but should ideally be shorter than traditional copyright regimes. It has been argued that within the copyright system, by providing protection for shorter duration "the new model of AI copyright protection would give rise to significantly less interference with the existing norms of copyright law. There would be lesser potential for AI authors to crowd out human authors in creative markets, as the former would soon lose their copyrights". <sup>49</sup>As Sik Cheng Peng suggests, if AI-generated works are to be protected, it is better to adopt a sui generis<sup>50</sup> right similar to one conferred on "databases" under the European Union Database Directive. 51The right so granted may prevent "outright and unfair exploitation of the works". Such a system may have drawbacks such as non-disclosure of involvement of AI by its owner. The system, therefore must ensure that there is true disclosure with respect to the creation process of such works and the involvement of AI. The law relating to unfair competition may also be an option for the protection of the AI-generated works. 52 The World Intellectual Property Organizations (WIPO) is already considering the issue of authorship and the law which may be adopted in this regard.

<sup>&</sup>lt;sup>49</sup> Dilan Thampapillai [2019] "The Gatekeeper Doctrines: Originality and Authorship in Australia in the Age of Artificial Intelligence", WIPO-WTO Colloquium Papers, p.no. 2.

<sup>&</sup>lt;sup>50</sup> Sik, Cheng Peng. (2020). Artificial Intelligence and Copyright: The Authors' Conundrum. Available online

<sup>&</sup>lt;sup>51</sup> Directive 96/9/EC, of the European Parliament and of the Council of March 11, 1996 on the Legal Protection of Databases, 1996 O.J. (L 77) 20.

<sup>&</sup>lt;sup>52</sup> Ibid.

Examination of the Ownership of Intellectual Property Rights in Artificial Intelligence Generated Documents, https://doi.org/10.53982/ali.2024.1201.10-i

Apart from the issue of authorship, a new issue has been identified by WIPO, that is copyright issue in "deep fakes". "Deep fakes" is basically "the generation of simulated likenesses of persons and their attributes, such as voice and appearance."53 The role of AI in the Deep fake technology is ever increasing. There may be more issues than copyright alone, such as privacy and defamation, when somebody is shown in deep fake without his/her authorization. The moot question that arises here is whether such deep fake work, if produced without the authorization of the person concerned should be protected under the copyright law at all. Further, where authorization has been given by the person concerned, what will be his/her rights in such works under the copyright law? Can a system of equitable remuneration for the creator of deep fakes and the persons concerned depicted in the work be adopted?<sup>54</sup> These issues have to be resolved as increasing uses of AI will continue to pose more challenges in the time to come.

#### 4.0 CONCLUSION

This paper has examined the various options available for ownership of copyright in AI generated documents. While it seemed plausible that the creators of the AI tools should enjoy the IPR in documents generated from the use of their tools, the question whether the AI tools they created could have generated the document on its own without human effort comes to mind. It then becomes a better option to ensure that the person who used the tool, enjoys the copyright in the document generated. It will be better that creators of AI get paid for the use of their tools and not paid for what their tools generate. Also, individuals who generate documents from AI are advised to acknowledge the tools used and ensure that they further develop the document to give it originality and help the user establish his rights to the ingenuity of that document.

<sup>&</sup>lt;sup>53</sup> WIPO Secretariat, Revised Issues Paper on Intellectual Property Policy and Artificial Intelligence, WIPO/IP/AI/2/GE/20/1 REV, May 21, 2020.

Ibid.

<sup>&</sup>lt;a href="https://www.researchgate.net/publication/347945203">https://www.researchgate.net/publication/347945203</a> Artificial\_Intelligence\_and\_Copyright\_The\_Authors'\_Conun drum> accessed 13th June, 2024

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As far as copyright in AI generated documents are concerned, the individual whose information was lodged in the tool to create the work should be the right holder. To avoid several people having copyright ownership in similar works generated using AI, measures should be put in place to ensure that people who use AI contribute to the document generated using their own God given intellect. This would mean that no one should enjoy IPR in a work that is one hundred percent AI generated.

#### **5.0 RECOMENDATIONS**

- Creation Of Copyright Protection for AI Owners
   Practitioners must acknowledge that given recent enhanced computer capabilities, and the introduction of commercially available AI tools, humans are no longer the only source of innovative and creative works. Therefore, policymakers must recognize the need for incentives (under the form of copyright protection) for programmers and AI owners in order to stimulate future development and investment in the AI field.
- 2. Copyright laws should recognise AI as creative tools distinct from human beings AI is a Machine Intelligence and should be viewed from the lens of creative tools. In this regard it may be easier to consider copyright protection for the works generated by AI, the same way we view the Camera device as a tool of the photographer that enables the grant of copyright to the photographer. So also should AI be seen as a tool that assist in the creative process. Doing otherwise will open a pandora box, for instance, if the AI machine is granted copyright, how can it protect itself against infringement and if its able to, how can it enforce it copyright. Further, where work generated by AI is found to have infringed on an existing copyright, who is held responsible? Viewing AI as a tool in the creative process will give the Human who is using it to create the responsibility of confirming that the output of such work and verifying that it is in line with current legal regimes and does not constitute an infringement.
- 3. Each Country Should Have Clear Provision on AI Generated Documents

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With the evolution of AI as inevitable tools of creation, countries must create bespoke laws to protect and regulate the adoption, use and enforcement of copyright in AI to avoid loopholes and speculation in this field.

4. Users of AI Should Be Compelled to add Sufficient Effort Work that is 100 Percent AI Generated should not qualify for copyright protection. Aside from input from AI tools, the requirement of the law that sufficient effort must be expended on each work to give it an original character.