IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

The Impact of Artificial Intelligence on Intellectua l Property Rights: Measures Innovation and protection

Mrs.A.Veerakanmani
Assistant Professor, Department of Business Administration, Ananda College, Devakottai
Mrs. A.Ramya
Assistant Professor, Department of Commerce and Business Administration, Nachiappa Swamigal Arts and Science College, Koviloor

Abstract

Artificial intelligence, which seems like a remote dream, has now encouraged from science literature movies to reality, gaining thrust in the last few years and leading to many developments in almost every field. All industries will be impacted by AI, and AI is no exception. The impact of intellectual property on the field of intellectual property will be twofold. On the one hand, intellectual property will prove ownership of patents and patent search tools, will be researched and searched in a timely manner, and provide a system for installation. inventions and provides innovators with methods for existing patents similar to their own ideas and many other things, but on the other hand, intellectual property can also come Voluntary, it also proves to be a threat to innovation and creativity, knowledge of rights in the mind.

The emergence of Generative Artificial Intelligence (AI) has ushered in a new era of innovation and revolutionized the intellectual property rights (IPR) landscape. This research paper aims to explore the balance between supporting AI-generated creativity and protecting personal AI. Generative AI is capable of producing a wide range of original content, from writing to scientific research, posing a serious challenge to the notions of human intelligence and intellectual property holders as a creative person. This article provides an in-depth look at existing legal frameworks regulating intellectual property rights and examines their relevance in overcoming the challenges presented by artificial intelligence. - create content. It raises questions about the writing and history of the digital age by showing important circumstances in which works independently created by artificial intelligence may qualify for copyright. Additionally, this article explores the ethical and economic implications of AI in the field of intellectual property, considering its potential to create content freedom and the risk of making humans creative. Using a multidisciplinary approach and drawing on knowledge from legal science, technology, and ethics, this study presents a revised legal model innovation that incorporates the unique features of artificial intelligence while protecting the rights and motivations of human creation.

Keywords: Artificial Intelligence, Intellectual Property Rights, Copyright Law, Patent Law, Machine Learning.

Introduction

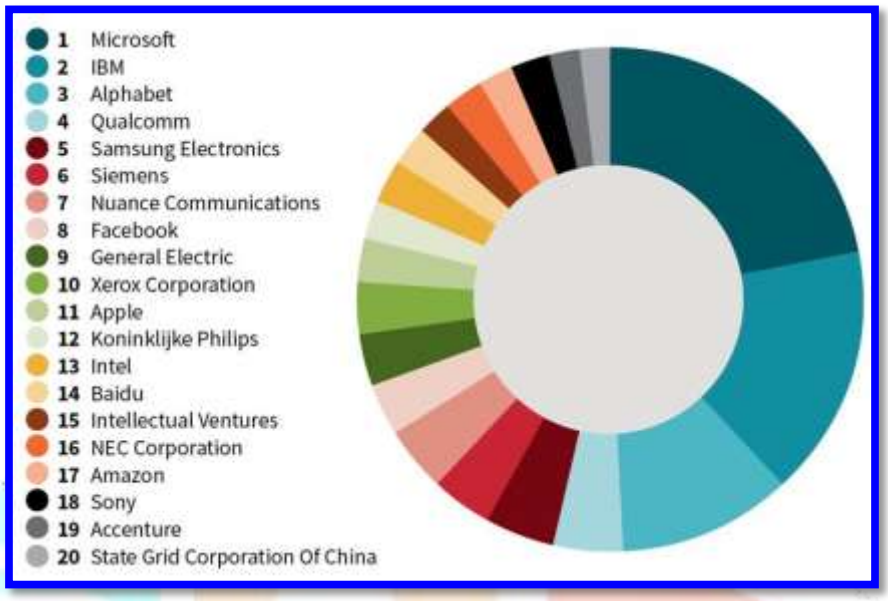
Over the past few years, we have seen the rapid development of artificial intelligence (here called AI) that can perform simple tasks such as calculating truly complex tasks. In short, in the future, artificial intelligence will be able to do everything that humans do, and even more. There is still a lot of confusion about intelligence, and the pros and cons of intelligence are one of the most debated topics today. Although there is no universally accepted definition of artificial intelligence, the simplest understanding is the development of systems and software that can perform tasks often required by human intelligence. While there is no doubt that the field of intellectual property has been and will not be affected by intellectual property, the intersection of intellectual property and property intelligence may have two aspects. On the one hand, it can turn out to be an asset in the field of intellectual property, but it can also be a threat. This article will discuss in detail the impact of intellectual property on intellectual property, especially copyright, patents and traditional knowledge, and will also discuss liability for intellectual property infringement.

The emergence of artificial intelligence (AI) in the rapidly changing digital landscape marks the arrival of a revolutionary era of creativity and innovation. This technological advancement has created unprecedented opportunities and significant challenges for intellectual property rights (IPR). The intersection of IP and intellectual property raises important questions about authorship, originality, and creativity. As intellectual systems become increasingly capable of producing works of art, texts, and even scientific research, the traditional boundaries of intellectual property are blurring. The basis of intellectual property has always been to protect and promote people's ideas and innovations. However, the emergence of intelligence as non-human intelligence opposes this practice. The current law regulating intellectual property rights is not designed to cover the production of intellectual property, leading to legal and ethical problems. This article aims to explore the complexity that AI brings to the context of intellectual property ownership. It explores the potential need for policy reform to balance legal uncertainties, ethical considerations, and human protection with the new capabilities of artificial intelligence. Moreover, the economic impact of intellectual property in the commercial sector cannot be ignored. The ability of AI to enhance creativity and create new content opens new opportunities for the expansion of businesses and business models, but also creates risks of destroying the economic benefits of human intellectual rights. The purpose of this article is to provide a comprehensive analysis of the challenges and opportunities and provide insight into how intellectual property will evolve.

The future of intelligence

Today, artificial intelligence can perform tasks that concern human intelligence, and research and development of artificial intelligence continues. But when talking about results, we must not forget that after all, it is the machine and for the machine, and there are cases when the machine goes beyond the

control of the programmer and begins to work independently. These tasks can be constructive or destructive, but controlling an AI machine or service will be difficult if it starts operating on its own and outside the programmer's control. Although much work has been done in the field of artificial intelligence, there are still many mysteries. Hopefully, in the future, the same problems will be solved and we will have a clear plan for how intelligence can be improved. People play a role in life and production.



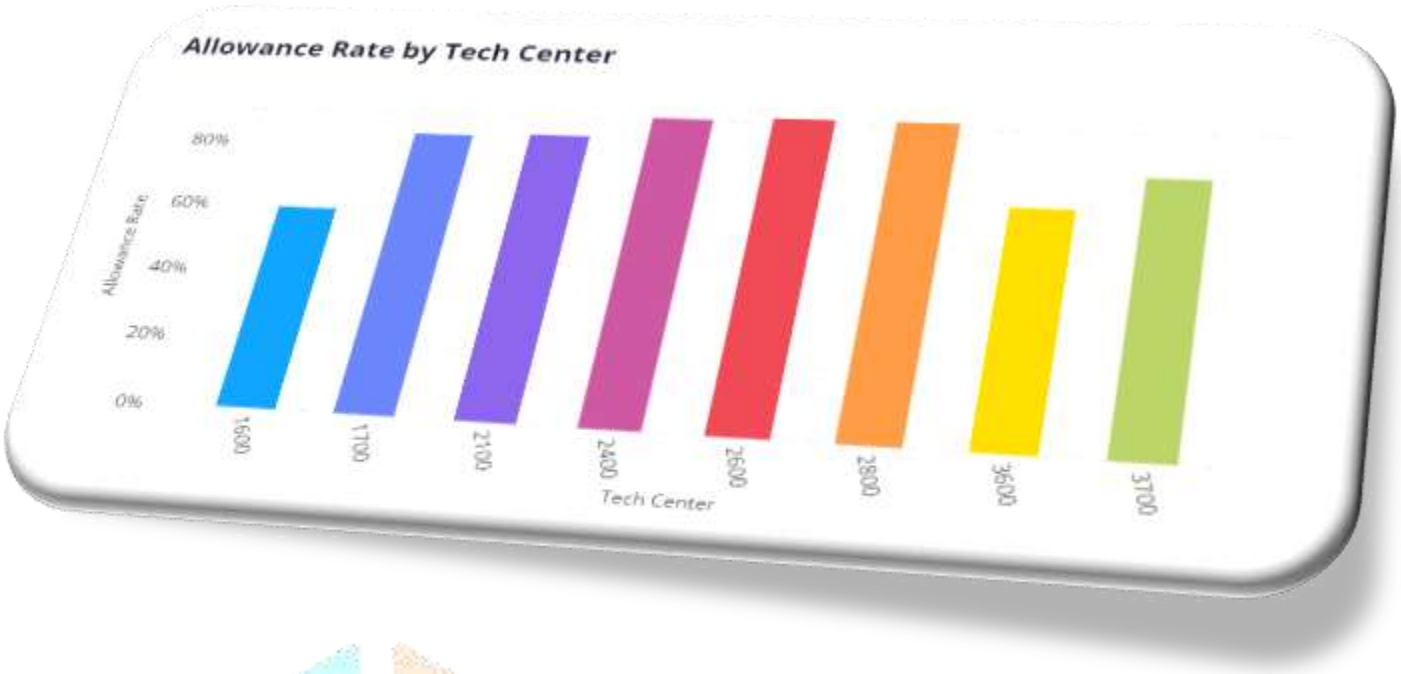
Artificial Intelligence Intellectual Property Trends

Artificial Intelligence and Copyright

In general terms, copyright refers to written works, songs, software, etc. It refers to the rights granted to the creator of the original work. Although the intersection of intellectual property law and law is not new and has been going on for many years, there is no debate that it is only a means of creation as to who will be the owner of the work according to the program or machine. Just like paper, the idea or work comes from the programmer, but with the development of intelligence, when we create machines with human intelligence, capable of creating their own unique works, the question is: who will be the master? Whether the copyright belongs to the programmer, the intelligent machine, or the program is the law currently under discussion. Machine learning is a category of artificial intelligence in which information is fed into a machine or program and the machine can create original tasks independent of humans. Therefore, the development of artificial intelligence has led to many uncertainties and the need for rules and regulations in law, otherwise conflicts will arise.

Artificial intelligence and patents

Today, the intersection of intellectual property law and patent law is accelerating. While intellectual property provides patent protection, patent search, patent search tools and proves to be an asset for inventors, it will also allow them to quickly understand whether similar ideas exist. Patents are about invention and innovation, and AI has the ability to have human intelligence to complete inventions without



Artificial Intelligence (AI) Patent Filings Continue Explosive Growth Trend at the USPTO | Patent Next

human input or intervention. There are some areas we want to specialize in when it comes to patents and intellectual property, such as:

Weapons: The global movement to use intelligent machines and programs to wage war. Debates about how intelligence should be regulated under international human rights law, although not without controversy, are beyond the scope of this article; But the problem is that if there are weapons produced by intelligent machines or programs, there is uncertainty about who will make them. You have access to that weapon.

Pharmaceutical Industry:

When it comes to patents, the most important thing is the pharmaceutical industry or new drug development. Now, when AI is successful in drug development, patent issues arise. For example, in the current situation where everyone is looking for a vaccine against a global epidemic, if this smart machine produces the same vaccine, there will be much clarity about who will own the patent for the vaccine. Whether ownership is in a smart machine or program, the programmer who created that machine, or the person who purchases the vaccine. If this problem is not solved, it will not be possible to decide how vaccine prices will be given to other countries. Therefore, it is necessary to eliminate these problems at the initial stage.

Road Safety:

Many plans have been made to improve road safety, but the number of deaths in traffic accidents cannot be ignored. Artificial intelligence has the potential to solve the problem of preventing the loss of human life, just like the development of driverless cars. In addition, there are companies that already work on security and use their expertise in this field. For example, Microsoft is starting to develop software with facial recognition, the driver's behaviour can be monitored and timely warnings can be issued to prevent accidents.

New Technologies:

We come across many inventions every day and patent law is all about innovation and invention. As mentioned above, if an AI machine or programmer creates the patent, there should be a clear understanding of who will own the patent and whether the patent belongs to the machine or the programmer.

Artificial intelligence and natural intelligence

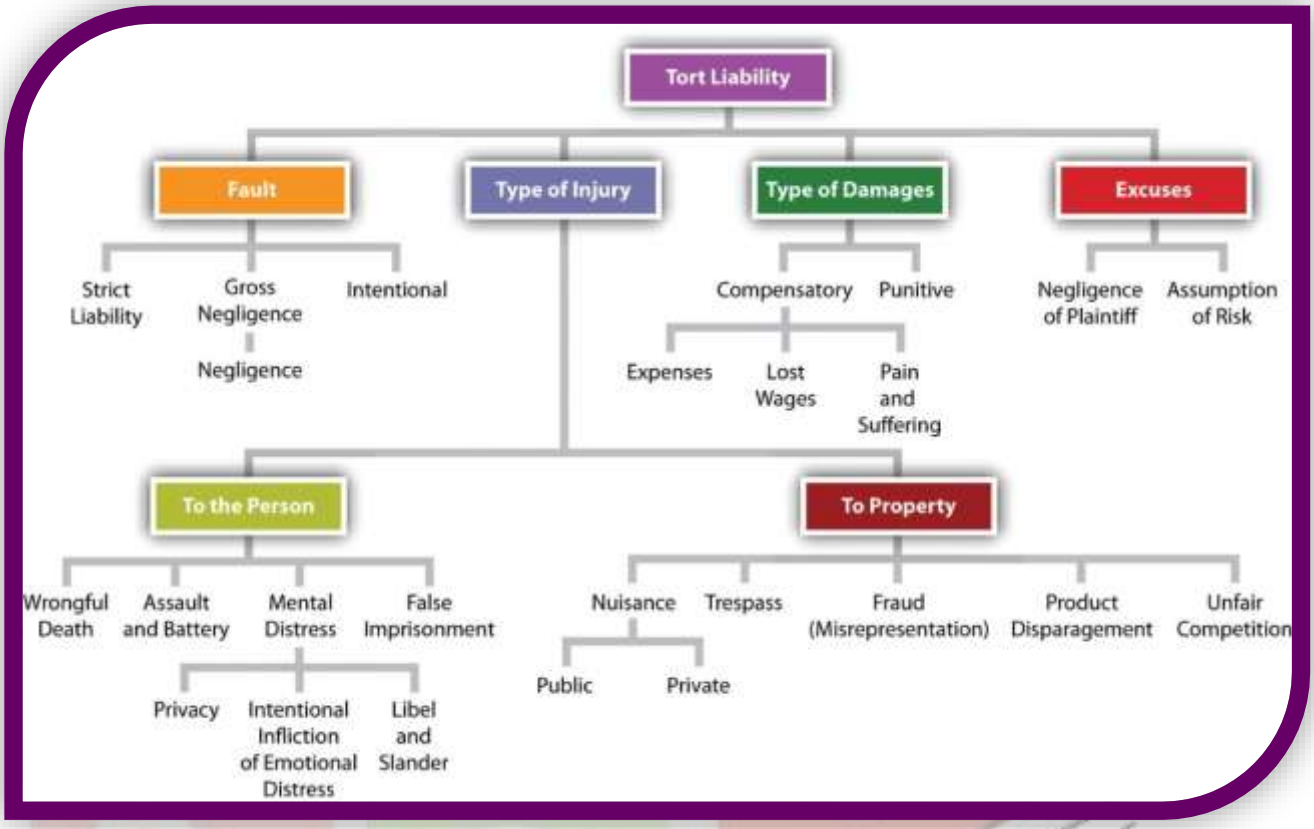
Traditional knowledge is something (can be a skill, knowledge or practice) acquired or followed over time. Knowledge is passed from generation to generation through this community. In some cases, artificial intelligence can interfere with traditional knowledge because it extracts content from traditional knowledge. Therefore, in light of the above discussion, intelligent machines or programs will influence traditional knowledge that is part of the rich cultural heritage of many societies.

Natural Intelligence vs Artificial Intelligence

Natural Intelligence Advantages	AI Disadvantage
Natural Intelligence is creative – the ability to acquire knowledge is inherent in humans	AI systems have a static knowledge, they work with only the programmed knowledge
Natural intelligence work with sensory experience	AI system can work with only symbolic input
Humans have the natural ability to reason, which is applicable to a wide context of experience	AI system have a very limited scope and can reason to a limited extend based on the reasoning mechanism implemented

Tort liability

Who will be held responsible if artificial intelligence violates intellectual property rights is one of the most controversial issues. The role of the programmer, the role of the machine, or the role of someone else there are uncertainties on this issue.



If the programmer knew that the machine would infringe on intellectual property rights, this responsibility would fall on the programmer since he knew the interference was occurring after creating the program or machine. However, if the programmer does not know or wants to violate intellectual property rights and the intelligent machine or program still violates intellectual property rights, it is difficult to determine who is responsible. So this is another mystery and there is a gap to be filled to determine the responsibility of the AI machine or program.

If it is a tort that is considered a liability, how can intelligence be created against the person? As we have seen above, the issue of accountability is of great importance and must be resolved, otherwise it will lead to confusion and confusion.

End of Chapter

There is no doubt that artificial intelligence can be an asset to some extent in the field of intelligence, as it can perform many non-existent productions that aging people voluntarily perform and help the welfare of the country without effort. Artificial intelligence has many flaws and uncertainties, but due to the problem of criminal decision-making responsibility, AI will also emerge as a threat. The creation of laws and regulations regarding intellectual property rights and responsibilities is determined. In addition, it should be clear who will be the owner of the copyright, patent or other intellectual property rights regarding the

intellectual work or invention. So AI is still in a very early stage with a lot of development happening, and until something about AI rules is established, the debate about the impact of AI will not end, either in an industry or specifically in the AI field. Usage, responsibility, and what allows for intellectual intervention. An approach to intelligence, its operation, management and accountability is the need of the hour, considering the current development of intelligence. In short, artificial intelligence works very well if it is under the control of programmers, but when it starts working on its own without external control, it voluntarily harms not only property but also all people who cause the threat. Average.

References

[1] Anderman, S. D., & Schmidt, H. (2011). EU Competition Law and Intellectual Property Rights: The Regulation of Innovation. Oxford University Press.

[2] Besen, S. M., &Raskind, L. J. (1991). An Introduction to the Law and Economics of Intellectual Property. Journal of Economic Perspectives, 5 (1), 3 -27.

[3] Boden, M. A. (2016). AI and Creativity. In Artificial Intelligence (pp.250 - 267). Springer.

[4] Bostrom, N., &Yudkowsky, E. (2014). The Ethics of Artificial Intelligence. In The Cambridge Hand book of Artificial Intelligence (pp.316 - 334). Cambridge University Press.

[5] Burk, D. L., &Lemley, M. A. (2009). The Patent Crisis and How the Courts Can Solve It. University of Chicago Press.

[6] Cohen, J. E. (2018). Law for the Platform Economy. UC Davis Law Review, 51 (1), 133 - 204.

[7] Doe, J. (2023. Intellectual Property in the Age of AI. Legal Tech Review, 5 (1), 45 - 60).

[8] Eandes, W. M., & Posner, R. A. (2003). The Economic Structure of Intellectual Property Law. Harvard University Press.

[9] Elgammal, A.,Liu, B., Elhoseiny,M., & Mazzone, M. (2017). CAN: Creative Adversarial Networks, Generating "Art" by Learning About Styles and Deviating from Style Norms. arXiv preprint arXiv: 1706.07068.

[10] ETHICSGUIDELINESFORTRUSTWORTHYAI (2019) retrieved from https: //www.aepd.es/sites/ default/files/2019 - 12/ai - ethics - guidelines.pdf

[11] Frischmann, B. M., &Selinger, E. (2018). Re - Engineering Humanity. Cambridge University Press.

[12] Giovanni B. Ramello, 2005. "Property rights, firm boundaries, and the republic of science - - A note on Ashish Arora and Robert Merges, " Industrial and Corporate Change, Oxford University Press, vol.14 (6), pages 1195 - 1204

[13] Goodfellow, I. J., Pouget - Abadie, J., Mirza, M., Xu, B., Warde - Farley, D., Ozair, S., Courville, A., &Bengio, Y. (2014). Generative Adversarial Nets. In Advances in Neural Information Processing Systems.

[14] Green, M. (2023). Rethinking Intellectual Property in the AI Era. IP Law Bulletin, 26 (3), 159 - 172). Hilty, R. M., & Liu, K. - C. (2019). Artificial Intelligence and Intellectual Property. Journal of Intellectual Property, Information Technology and E - Commerce Law, 10 (2), 77 - 85. https://deepmind.google/technologies/alphago/

[15] https://scarc.library.oregonstate.edu/omeka/exhibits/show/mcdonald/incunabula/gutenberg/#:~:

text=By%201440%20Gutenberg%20had%20established, of%20indulgences%20for %20the %20 Church.

[16] https://www.dcs.k12.oh.us/site/handlers/filedownload.ashx?moduleinstanceid=1862&dataid=1924&FileName=Sony_Betamax_Case_Summary.pdf

[17] https://www.newscientist.com/article/2132086-deepminds -ai -beats - worlds -best - go -player - in -latest -face- off/

[18] International Intellectual Property Alliance (2023). Guidelines for AI and Intellectual Property. IIPA Reports, (1), 5 - 15.

[19] Karras, T., Laine, S., &Aila, T. (2019). A Style - Based Generator Architecture for Generative Adversarial Networks. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition.

[20] Kop, M. (2020). AI and intellectual property: Towards an articulated public domain. *Texas Intellectual Property Law Journal, 28* (1), 297–341.