THE CONVERGENCE OF AI, METAVERSE AND IPR: THE NEED TO RETHINK AND RESHAPE THE IPR FRAMEWORK

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ABSTRACT:

Intellectual Property Rights are exclusive rights dedicated to the creations, innovations and inventions of individuals. It aims to protect the intangible property of humans for which it has invested efforts in the form of manpower, energy, time, skill, money, etc. However, the coming of new technologies like Artificial Intelligence and the Metaverse poses a significant challenge to the traditional notions and fundamentals of Intellectual Property Laws. This forces us to interpret and understand IPR laws in a nuanced manner. With this background, this essay deals with the convergence point of AI, Metaverse and IPR laws. This article then specifically deals with the issues that AI and the Metaverse present for each type of IP, which includes copyright, trademark and patent. At the same time, there are certain shortcomings that arise from the domestic legislations on IPR, which make these laws incompatible with dealing with creations and innovations that are associated with AI and the Metaverse. However, this essay is not just limited to challenges but also evaluates possible solutions that various scholars have suggested by bringing the concepts of mental capacity, dual rights, autonomous and semiautonomous machines. This essay concludes with a suggestion for a possible way out of this issue. It proposes accountability of these platforms against IPR infringement and at the same time suggests a different IP framework for autonomous and semiautonomous creations/innovations. This essay, in its essence, aims to highlight the need to restructure the existing IPR framework so that it encompasses Artificial Intelligence and the Metaverse within its ambit.

A BRIEF INTRODUCTION

To begin with, Intellectual Property Rights is an important legal sphere which deals with the rights of intangible property. This intangible property comes into existence from the intellect of the human. IPR laws exist to protect the creation of humans by vesting certain rights and protection in the author or owner of such intangible property. Intellectual property can be classified into various categories: Copyright, Trademark, Patent, Industrial designs, Geographical Indications and Trade Secrets. In the present time, IPR has to go through various challenges that are posed by the new technologies of this era. The new technologies are Artificial Intelligence and the Metaverse. The advent of Artificial Intelligence (AI) and the Metaverse has redefined innovation, creativity, and the consumption of intellectual property (IP). As a result, the concept of IP itself has suffered challenges from their advent. To understand the challenges, it becomes imperative to understand both the technologies and the way in which they work.

It was in the 1980s that the concept of Artificial Intelligence came to the forefront as a result of a boost in funds and the expansion of algorithm toolkits. Computers began to be trained through experiences and this was done through the process of deep learning. This development has reached a place where AI is capable of performing multifaceted tasks better than humans and with better speed. It can completely alter the face of a country and its policies hence impacting the world in the process. On the other hand, metaverse is an emerging technology. The first AI can be traced back to 1950 when a Thesus (robotic mouse) came into existence but the coming of the metaverse is a somewhat new phenomenon. The metaverse is a virtual three-dimensional space where people and businesses can engage with each other digitally. People can interact, create, and transact with digital assets, which represents a new frontier in human interaction and commerce. It is completely a dynamic platform that has transformed the way we connect to people and society. AI and the metaverse, together have become part of our lives which is evident also as it has started to play a great role in our lives. AI and metaverse are not only capable of performing human tasks but also have augmented the tasks that could be performed by humans.[1] They can recognise any sort of expression and content, and when

[1] Mala Chatterjee and Jeanne C. Fromer, MINDS, MACHINES, AND THE LAW: THE CASE OF VOLITION IN COPYRIGHT LAW, 119 Columbia Law Review 1887, 1890 (2019).

demanded, can even play or show content from their original location. So these technologies have moved much ahead of human capabilities.[2]

NAVIGATING CHALLENGES IN DETAIL

The issues arise when these technologies challenge Intellectual Property Rights in a way that forces us to look at the concept of IPR again in a nuanced manner. The issue can be categorised into two categories. The first issue is that AI and the Metaverse are so advanced that it is easier for them to locate and use any sort of protected creative work. So, it is easier for them to infringe IPR laws. At the same time, both AI and Metaverse exist in virtual space, hence it is not that easy to identify infringement in case it happens. Hence, the chances of undermining IP laws are always at stake due to AI and the metaverse. The other issue is that AI and the metaverse are capable of creating artwork or literary work, can also have their own trademark and trademarks of businesses operating in virtual space and hence have features which are similar to intellectual property. In such a case, the question often arises as to whether AI and Metaverse should also be made bearers of Intellectual Property Rights, and even if IP protection is given, then who would be considered the owner of such intangible property? Whenever intellectual property emerges through the algorithms of AI, there is always a question over who should hold the rights of the IP, the principal of AI or the end user of it.

To start with AI, the discussion that often comes up revolves around the question of whether artificial intelligence should have equal rights concerning intellectual property rights as humans. In the present time, AI has enabled its users to create complex algorithms and identify trends and relationships. Even one of the HBR articles mentioned that AI is capable of recovering patterns and relationships, using them to create new rules, and then making judgments and predictions.[3] If we take the case of copyright, then the music industry presents a good example. AI has led to a new type of musician who creates music through algorithms without any prior knowledge of music. At the same time, AI has enabled people to access musical archives hence impacting the ownership of music.[4] The coming of AI has led to disputes over the notion of creativity which has affected the ownership as well. The very recent

[2] Mala Chatterjee and Jeanne C. Fromer, MINDS, MACHINES, AND THE LAW: THE CASE OF VOLITION IN COPYRIGHT LAW, 119 Columbia Law Review 1887, 1890 (2019)
[3] Manasvita Sharma, Intellectual Property Rights and Artificial Intelligence, 5 INDIAN J.L. & LEGAL RSCH. 1, 7 (2023).
[4] id at 8

incident was in November 2024. Canadian news channels alleged Open AI for using their news content to train Chat GPT.

Metaverse has also equally presented challenges for the Copyright holders. Metaverse often creates problems in the identification of the ownership of intellectual property rights in the virtual world and this problem becomes bigger and bigger as more and more people join this intricate virtual space. The existing rights on intellectual property intend to protect non-physical in physical and virtual worlds as well.[5] Despite the protection in the virtual world, metaverse users often generate renditions of copyrighted materials hence infringing them.[6] The main challenge arises out of the fact that there is uncertainty over the extent to which Intellectual Property protection can work in the case it has been infringed in the metaverse. There do exist conventions and agreements which intend to protect Intellectual Property in the metaverse as well. This includes the Berne Convention and the WIPO copyright treaty. Article 1(4) of this treaty clearly states that if a copyright-protected work has been stored digitally in electronic media, then it would be considered a reproduction of the protected original copyright material and to do so permission needs to be taken from the copyright holder.[7] There are always chances of virtual theft, piracy and unauthorized uses of copyright material in the metaverse. Identifying an infringer of copyright in the virtual world like that of the metaverse is not as easy as it is easy for finding one in the real world. It is so as in the metaverse it is very easy to replicate or distribute digital assets like music, artwork or any virtual good. Metaverse offers pseudonymity and anonymity to its users which makes it more difficult to find the infringer.[8] Another issue that arises is that in the sphere of the metaverse, lots of digital content is created and it becomes difficult to differentiate between authorship and ownership in such a situation. The conflict exists between whether the rightful authorship should lie with the one who created the digital content or with the proprietorship of the platform on which such digital content exists. Owners of metaverse platforms claim that authorship of such material on the argument that digital content also depends upon the design and programming of the platform in the metaverse, so they are rightful to seek IP rights along with the creator of such material.[9]

[5] P. Ardra Menon, Protection of Copyright in Metaverse: Risks and Challenges, 6 International Journal of Legal Science and Innovation 420, 420 (2024)
[6] P. Ardra Menon, Protection of Copyright in Metaverse: Risks and Challenges, 6 International Journal of Legal Science and Innovation 420, 420 (2024)
[7] id at 421
[8] P. Ardra Menon, Protection of Copyright in Metaverse: Risks and Challenges, 6 International Journal of Legal Science and Innovation 420, 423 (2024)
[9] ibid

While navigating challenges, attention also needs to be given to another prominent IPR, Trademarks. Trademarks have also experienced impact because of AI and Metaverse, Artificial Intelligence is capable of recovering patterns and relationships, hence there are likely chances that it can create algorithms which can produce content from the trademarks of other organisations.[10] This increases the chances of misappropriation of trademarks by AI. Even in the cases of trademarks, infringements by AI users cannot be tracked. In 2023, there were many complaints which claimed that companies are training AI to replicate creative expressions found in various trademarks, such as logos and brands replicate creative expressions found in various trademarks, such as logos and brands. As a result, the US Patent & Trademark Office (USPTO) started an inquiry into the infringements of various IP rights.[11] This doesn't mean that AI always presents challenges for AI. Artificial Intelligence has played an important role in the protection of trademarks as it can detect patterns and counterfeiting, hence protecting the respect of reputed brands and related financial losses.[12]

Metaverse as a virtual platform, has brought various developments for trademarks and at the same time challenges as well. One of the developments in this regard has been that companies have a chance to expand their trademark even in the metaverse hence increasing their popularity. Also, various virtual goods have come up to the trademark offices for their registration as trademarks.[13] Even trademark protects the logos and brands of these metaverse platforms. Initially, it was challenging to give a niche/class to these sorts of goods, but the system has adapted itself with the coming of the metaverse. Therefore in the 12th Nice classification by WIPO various recognised virtual goods and non-fungible tokens have been included in the classification of the goods.[14] If we see this from the domestic point of view, then in India trademark is regulated through the Trademark Act, of 1999. Though changes in WIPO's classification list mean that virtual goods in India can also get trademark recognition but the issue is the lack of domestic legislation to regulate the trademarks of metaverse. As a result, the trademarks of Metaverse would have the same remedies that are available for

[10] Manasvita Sharma, Intellectual Property Rights and Artificial Intelligence, 5 INDIAN J.L. & LEGAL RSCH. 1, 20 (2023).
[11] Manasvita Sharma, Intellectual Property Rights and Artificial Intelligence, 5 INDIAN J.L. & LEGAL RSCH. 1, 20 (2023).
[12] id at 19
[13] Nayantara Sanyal and Amishi Vira, Intellectual property rights in the Metaverse – Trademarks, Bar and Bench, (December 31st, 2025 7:58pm), https://www.barandbench.com/law-firms/view-point/intellectual-property-rights-in-the-metaverse-trademarks.
[14] Nayantara Sanyal and Amishi Vira, Intellectual property rights in the Metaverse – Trademarks, Bar and Bench, (December 31st, 2025 7:58pm), https://www.barandbench.com/law-firms/view-point/intellectual-property-rights-in-the-metaverse-trademarks.

physical trademarks. However, the issue is that these remedies are not adequate to protect trademarks of the virtual world.[15] Another potential worrying issue is that when brands expand their presence and business to the virtual world, it becomes difficult to find infringers in the case infringement took place in the virtual world as mentioned earlier. So, it becomes necessary for brands to get the trademark for the virtual world such as the metaverse as well as the earlier trademark rights of the physical world may not be adequate to protect from infringement.[16] One of the important cases in this context would be Hermes v Rothschild. In this case, the luxury brand Hermes accused Rothschild of and hence infringing the trademark rights of Hermes.[17] The reason why it is difficult to enforce copyright and trademark laws against the metaverse is also due to the decentralisation and virtual nature of the metaverse platform.[18] Metaverse platforms rely on blockchains and other distributed technologies. There is no central authority and therefore it is difficult to identify any of the infringers of IP rights.

Another important IPR is Patent. In this case, we see that a patent complements AI as the main purpose of an AI patent is to protect new innovations and this includes technological inventions such as AI itself. So AI platforms can also be monetized, rewarded and compensated. However, AI helps humans in generating new ideas and innovations. In such cases, the dispute often arises over who should be given the ownership for the idea or innovation. Metaverse, on the other hand, presents tougher challenges for Patents. One example could be that of Augmented Reality and Virtual Reality, both of which are essential elements of the metaverse.[19] In the coming times, there are fresh chances for IPRs like patents for the technologies of devices and software that are based on AR and VR. However, it is not as simple to apply patent protection on the metaverse as it seems to be. The complexity of issuing a patent for metaverse-related technology can be explained in three folds.[20] First, the metaverse as a whole cannot be patented, separate patents need to be acquired for software, AR, VR and operating systems needed to build a unique and customized Metaverse. Secondly, many of the the patented innovations and technologies are already being used in the metaverse hence violating

[15] Nayantara Sanyal and Amishi Vira, Intellectual property rights in the Metaverse – Trademarks, Bar and Bench, (December 31st, 2025 7:58pm), https://www.barandbench.com/law-firms/view-point/intellectual-property-rights-in-the-metaverse-trademarks.
[16] Nayantara Sanyal and Amishi Vira, Intellectual property rights in the Metaverse – Trademarks, Bar and Bench, (December 31st, 2025 7:58pm), https://www.barandbench.com/law-firms/view-point/intellectual-property-rights-in-the-metaverse-trademarks.
[17] Hermes v. Rothschild, (2023) WL 1458126
[18] Maria Kalyvaki, Navigating the Metaverse Business and Legal Challenges: Intellectual Property, Privacy, and Jurisdiction, 3 Journal of Metaverse 87, 87(2023)
[19] Anshika Srivastava, Metaverse and Intellectual Property Rights, 3 JUS CORPUS L.J. 195 , 207(March 2023).
[20] ibid

Intellectual Property Rights which is also known as the 'virtualization of patents'. The third issue is that certain innovations are created by avatars of the metaverse. These innovations impact the real world and a recent example would be the Digital Vaccine of a metaverse game, which successfully received a patent from US authorities.

Another challenge that though seems to be minor in nature but needs attention is the incompatibility of present Intellectual Property laws with the modern world that is marked by modern technology like metaverse and Artificial Intelligence. In such an advanced era we find IP laws which are anachronistic.[21] For example, the copyright law in the USA grants rights and protection for 95 years, which is clearly anachronistic in the fast-moving world of AI and the metaverse.

ANALYSIS OF LEGISLATIVE CHALLENGES FROM DOMESTIC PERSPECTIVE

All those challenges that have been discussed yet have been from a global perspective, but if we look at it from a domestic perspective, then another challenge comes up and it is the lack of legal provisions in present domestic legislation concerning AI and Metaverse. If we look at the domestic laws on IPR in a comprehensive way, then it is evident that none of them were made to provide IPR to those virtual or any other asset created by AI or metaverse. Starting with the copyright act, of 1957, this legislation expresses under section 13 of the act that to fall under the right the work must be original. For originality, the criteria are that the creative work must meet the ‘baseline of creativity’. For a creative work that has been created by AI, it is easier to meet the standard of originality but the problematic section is section 2(d) and 57.[22] Section 2(d) expresses that the author is the person who causes the work to be created. The term ‘person’ in this context refers to a human being and a collective entity such as an association created by humans.[23] On the other hand, section 57 entails the moral rights of an author which include the right to paternity and integrity which cannot be given to AI as it lacks emotions, personal experiences and consciousness. The notion of a person doesn't encompass AI. As a result, in Indian law, AI-generated creation may be recognized as ‘original,’ the

[21] Deepak somaya and lav r. Varshney, Ownership Dilemmas in an Age of CREATIVE MACHINES, 36 Issues in Science and Technology 79, 85 (2020).
[22] Intellectual Property Rights in the Age of Artificial Intelligence: Navigating Challenges and Seizing Opportunities,https://www.iiprd.com/intellectual-property-rights-in-the-age-of-artificial-intelligence-navigating-challenges-and-seizing-opportunities/ (last visited on 3rd January, 2025)
[23] ibid

attribution of authorship to the AI system may not be warranted.[24]

In India Patent Act of 1970 deals with the rights of innovations but fails to define the inventor. If we give a fine reading to section 6 of the Act then we see that the law considers that to file a patent application, the person should either be the true and first inventor of the innovation or asignee of the inventor or legal representative of a deceased person. So, basically, there is an ambiguity over the jurisprudential scope of a person and whether the terminology person would include AI. In the case of Som Prakash Rekhi vs Union Of India & Anr, the supreme court held that a "jurisdictional person is the one to whom the Law attributes 'personality'. It remains up to the law to decide the scope of personality.[25]

Trademark Act, of 1999 doesn't state who can have a trademark. It just states that a trademark can be registered to the one which is distinctive in nature. Since trademark rights revolve around the imperative to prevent any potential confusion regarding the source, origin, or sponsorship of goods or services. So, basically, all those rules that apply to trademarks in the real world would apply to virtual goods as well.

So, it can be concluded that the present legal system is stuck in configuring the limits of the term person. Also, these laws are much older and so when they were made there was no contemplation over IPR for Intellectual Property that would come into existence through technology.

DIVULGING INTO POSSIBLE SOLUTIONS TO THE CHALLENGES

When such challenges exist for IPR then solutions need to be unearthed. As mentioned earlier as well it is difficult, to provide IPR to artificial intelligence and metaverse for their creations and also, they cannot be held liable in case of infringements these technologies commit but now the law should develop in a way that these man-made technologies also have the mental state or something similar to it for the purpose of the law. The basic example for this could be that when a machine-like AI copies the original copyrighted work of an author, it violates the

[24] Intellectual Property Rights in the Age of Artificial Intelligence: Navigating Challenges and Seizing Opportunities,https://www.iiprd.com/intellectual-property-rights-in-the-age-of-artificial-intelligence-navigating-challenges-and-seizing-opportunities/ (last visited on 3rd January 2025)

[25] Intellectual Property Rights in the Age of Artificial Intelligence: Navigating Challenges and Seizing Opportunities,https://www.iiprd.com/intellectual-property-rights-in-the-age-of-artificial-intelligence-navigating-challenges-and-seizing-opportunities/ (last visited on 3rd January, 2025)

IPR but cannot be held liable as it lacks personality. Philosophers have though developed the notion, which can also be a possible solution to it, that when a technology like AI copies a protected work, the technology provider can be held liable for the violation of the technology.[26] The technology provider can be held liable on the basis that AI has mental elements to a certain extent, so that they can be held as an agent of the human.[27] If we see the law, then it can be realised that the law to hold liability looks not only at willful action but also at the mental capacity of the wrongdoer. Mental capacity, which can be in the form of intention, negligence, motive and so on is pervasive in all the legal spheres.[28] As AI has become pervasive in our lives, it becomes imperative to look into the question of mental capacity or the element of AI. Some theories look for a solution to the issue of mental capacity to hold AI and metaverse liable for infringing the rights of protected work, trademark or innovation. Mind philosophers like David Chalmers and John Searle believed that machines which would include AI as well, are capable of replicating functional properties of the human mind. However, these philosophers believe that machines cannot have a conscious mind.[29] So it depends upon the law's requirement of mental element whether it would adapt it to fasten the liability on AI on the basis of the functional properties of the human mind that is embodied in today's AI with its all-pervasive presence. Based on the beliefs of these philosophers, Mala Chatterjee and Jeanne C. Fromer, in their paper, remarked that law is not necessarily or always concerned with conscious experience; instead, mental state is dependent upon the interest and value of a particular domain of law.[30]

The next major challenge is the Ownership dilemma, which also needs to be addressed. IPR's main motive is to protect the rights of ownership. The ownership could be of creative work, innovation or even of a trademark or trade secret. The ownership dilemma that arises when a work is created by AI is highly contentious. One of the most notable examples that could brief the issue would be in 2018 when for the first time an Artificial intelligence-generated piece of art was auctioned and that is also at a cost of $450,500 which is considered to be 40 times bigger than the estimated price. The painting was of Edmond de Belamy, from La Famille de Belamy, produced by the French art collective 'Obvious'. When this auction came into public,

[26] Mala Chatterjee and Jeanne C. Fromer, MINDS, MACHINES, AND THE LAW: THE CASE OF VOLITION IN COPYRIGHT LAW, 119 Columbia Law Review 1887, 1888 (2019).
[27] ibid
[28] Mala Chatterjee and Jeanne C. Fromer, MINDS, MACHINES, AND THE LAW: THE CASE OF VOLITION IN COPYRIGHT LAW, 119 Columbia Law Review 1887, 1891 (2019).
[29] id at 1913
[30] id at 1916

an artist and programmer Robert Barrat contested that the algorithm which Obvious used to produce this painting was created by him and he was the one who shared it online.[31] This dispute led to various profound questions arising around ownership, attribution, and intellectual property rights in the burgeoning field of creative works created by AI. AI has become so creative that they are also able to meet criteria like novelty, surprise, and usefulness hence making it possible to have IPR for the creations of AI as well. These AI technologies challenge the fundamental building blocks of existing intellectual property (IP) laws and institutions, which are misaligned with AI-driven innovation on multiple fronts.[32] IPR rights were based on the inherent humanness of creativity but this assumption has been turned on by the creativity presented by today's technology such as AI and Metaverse. Examples that have captured public attention include Google's Magenta system, which composes novel and pleasing music, and IBM's Chef Watson system, which produces new and flavorful food recipes. People have different opinions on the question of ownership of IPR of the creation generated by AI systems autonomously or semi-autonomously. These opinions can be grouped into three broad perspectives. The first perspective is that AI-generated creativity is nothing but a tool that would enhance creative or innovative output but does not have any inherent impact on IP rights.[33] The IP rights that would arise from such creations should be vested in human coinventors or collaborators of such tools.[34] Such a perspective would work only when the creation by AI is done in semiautonomous mode and the human collaborator plays a significant part in the creation. The second perspective is suited for autonomous creations of AI where the human co-creator didn't play a significant role and hence it doesn't seem important to incentivise them. Supporters of this perspective believe that such creations of AI should not be provided IP protection that is they should be made IP negative space. They should be kept in alignment with the fashion and tattooing field, where overprotective Intellectual Property laws are likely to stifle creativity and innovations.[35] The third perspective is based on the logic of dual IP rights. According to this logic, Intellectual Property rights should not only be given to those who produce the content through the AI system but also to those who created the AI

[31]Quartz, https://qz.com/quartzy/1437876/ai-generated-portrait-of-edmond-de-belamy-sold-for-432500 (last visited on 31st December,2024)
[32] Deepak somaya and lav r. Varshney, Ownership Dilemmas in an Age of CREATIVE MACHINES, 36 Issues in Science and Technology 79, 84 (2020).
[33] Deepak somaya and lav r. Varshney, Ownership Dilemmas in an Age of CREATIVE MACHINES, 36 Issues in Science and Technology 79, 84 (2020).
[34] ibid
[35] Deepak somaya and lav r. Varshney, Ownership Dilemmas in an Age of CREATIVE MACHINES, 36 Issues in Science and Technology 79, 84 (2020).

system. So if we take the example of the Artificial Intelligence created painting which was auctioned then both the one who created the algorithm as well as the Obvious need to be given the protection of Intellectual Property rights.[36]

A CONCLUSIVE ANALYSIS OF POSSIBLE SOLUTIONS: AUTHOR'S VERSION

A comprehensive synthesis of scholars' findings and opinions, as elaborated in the last two paragraphs, with personal suggestions, brings out the following conclusions as the solution to this burgeoning challenge. Firstly, possible solutions to infringement issues will be discussed. As, a part of the legal fraternity, what seems to be a better solution is, holding the technology provider liable for IPR infringements as they are the one who are maintaining algorithms of these technologies. AI and the Metaverse appear to act like agents of humans because they function the way algorithms have been structured by humans. At the same time, the notion of the functional and conscious element of mind propagated by Chalmers and Searle does not seem to be the right distinction as the technology has moved much ahead of time and it is highly possible in future that we would come across a AI which may have a conscious of its own. Still, there would always be a human algorithm working even behind a conscious AI. Therefore, the one who operates the core system of AI and Metaverse needs to be made accountable and liable for any sort of IPR infringement. Another suggestion would be that there needs to be a framework that would regulate AI and Metaverse platforms so that they take the required steps to protect against any sort of IPR infringement on their platform which may happen because of any third party. Of course, in such a case the third party would be the principal wrongdoer but the platform owners also need to be made accountable for their negligence. Moving to the next challenge of Ownership, If we analyse the three perspectives mentioned in the last paragraph, all of them are very complex and none of the perspectives is a one-for-all solution. The personal opinion tilts towards legislation that has a mixture of first and third perspectives. The law should recognises the IP rights of AI and Metaverse, and for that purpose, the law should distinguish between semiautonomous and autonomous creations/innovations. Therefore, Semi-autonomous creations/innovations and autonomous creations/innovations need to have distinguished IP rules of ownership. So in the case of semiautonomous creative content, the IPR rights should be based on dual rights, both the one who owns such a platform and the human cocreator should be entailed with IP rights. On the

[36] Deepak somaya and lav r. Varshney, Ownership Dilemmas in an Age of CREATIVE MACHINES, 36 Issues in Science and Technology 79, 84 (2020).

other hand in the case of autonomous creations/innovations, the IP rights should be entailed only to the owners of AI or Metaverse platforms. This difference is required because, in the case of semiautonomous creations/innovations, the co-creator plays a crucial role which is not there in autonomous creations/innovations. Also, IPR rights for technology providers cannot be ignored because they are the one who owns the very basis of such content creation and even though it is completely auto-generated by AI or Metaverse platforms, the role that algorithms created by humans play in the background of such platforms cannot be ignored. Dual rights will indeed create another issue of anticommons but the suggested structure for IP laws surely needs more refining and research. This can be ensured through proper bifurcation of ownership rules and liberal licensing rules so that there is no sort of restraint in creativity and innovation. And it keeps on flourishing. For the author of this essay, the second perspective doesn't seem to work because differentiating an artwork created in a metaverse from all other artwork created by the manual and intellectual efforts of humans will be unjustified for those who use their technological skills to create an artwork as it also involves the use of one's intellect. The above-mentioned suggestions are suitable for copyright, patent and industrial designs, but for trademarks and trade secrets, a different path needs to be taken. Trademarks have been recognised for virtual goods but they lack proper regulations so that they receive effective protection the way real-world trademarks have. Overall, it can be concluded that it is legislation only which can actually help in coping with the challenges that AI and the Metaverse bring for the Intellectual Property Rights. Amendments need to be brought to the existing IPR laws as well so that they meet present needs. As mentioned earlier as well the protection timeframe given to copyright and patents is unnecessarily long, it needs to be shortened. Last but not least various stakeholders need to put their input in the form of research, findings and opinions so that challenges to the IPR in the form of AI and Metaverse can be better navigated.