# HARMONIZING INTELLECTUAL PROPERTY RIGHTS WITH ARTIFICIAL INTELLIGENCE: PERSPECTIVE AND IMPLICATIONS FOR INDIA

Nandan Kumar (MA Economics, Delhi School of Economics, University of Delhi)

Poorva Aggarwal (MA Corporate Law, NALSAR University)

Shizan Ahmed (MA Corporate Law, NALSAR University)

#### **ABSTRACT**

There have been rapid advancements in the Artificial Intelligence (AI) sector. It is very much possible for AI to replace the work done by humans and can also help in enhancing various aspects of human life. AI can be used in many fields like education, engineering, business, medicine etc.<sup>1</sup> As these advancements follow there is a need to protect these specific set of technologies. Providing a legal framework for AI has become an important topic. Otherwise, it could lead to duplication of technology which can reduce the incentives to invest in technology. However, it is not easy to develop legal framework on this and establish rules regarding Intellectual Property Rights (IPR) because of the complexities that are present in the work that has been generated by AI, ownership of the original work and who would hold the patent. In this research paper, we look into the current framework that is there for Intellectual Property Rights and AI. Strategies that can be adopted to harmonize the innovation in Artificial Intelligence and their legal protection. We look into the jurisdictions in advanced economies like USA, Japan and Europe and analyse how they implement laws regarding the protection of latest technology and how those practices could be implemented in India in an efficient manner. We also look into how a proper legal framework and IPR are important for a country's economic growth through technological advancements and the reasons on why it is important. Through this study we analyse and contribute towards the wider discourse on the alignment of intellectual property policies with emerging technologies in an evolving global economy.

**Keywords:** Artificial Intelligence, Intellectual Property Rights, Legal Framework, Growth, Technology.

<sup>1.</sup> Patil N.H., Patel S.H., Lawand S.D., 'Research Paper on Artificial Intelligence and It's Applications' (2023)

#### **METHODOLOGY**

In this study we mostly use qualitative data to base our analyses and studies. We go through the existing literature and work on the legal framework regarding the protection of technology in both India and other countries and examine in detail the differences and similarities to come to the conclusion that can contribute towards a better understanding of IPR and Ai and how they can be harmonised and implemented. We also use doctrinal research methodology to analyse the laws present in various countries regarding the IPRs of AI and Technology.

#### WHY IT IS ESSENTIAL TO HAVE A PROPER LEGAL FRAMEWORK FOR AI?

There are many reasons due to which proper legal framework for AI is needed. Some of them are:

# 1. For the protection of individual rights

AI systems are known to process personal data which is invasive of an individual's privacy.<sup>2</sup> There is a need for proper regulations that address these issues so the personal information of an individual is not misused. There should be proper mention of consent requirements which details all the information an individual would be sharing.

# 2. Establishing Accountability

AI systems can make decisions affecting people's lives (business, healthcare).<sup>3</sup> It is important to have regulations that addresses the problem of who is to be held responsible in case something goes wrong and who should receive the compensation. This would lead to companies developing more effective and safer AI systems.

# 3. Promoting Innovation While Managing Risks

It is not only innovating that has become important, it is also essential that there is a balance between innovation and managing the risk that comes with it, therefor to achieve this goal we should have proper legal framework that both enforces the innovation in AI while also reducing the risk in there. This will also reduce the uncertainty for investors and also helps in preventing the development of harmful applications.

<sup>2.</sup> Data Protection Commission, 'AI, Large Language Models and Data Protection' (2024)

<sup>3.</sup> Patil N.H., Patel S.H., Lawand S.D., 'Research Paper on Artificial Intelligence and It's Applications' (2023)

# 4. Ensuring Transparency and Explainability

It becomes important to have a proper legal framework that requires transparency in the AI systems and for them to be comprehensible. There should also be transparency in the auditing of high-risk AI applications. Standards for documentation and record-keeping should be maintained.

#### 5. Managing Economic and Social Impact

AI impacts the economic conditions and also has social impact. There is a possibility of AI replacing humans in some sectors which puts their employability in jeopardize. This is specially the case for medium skilled workers.<sup>4</sup> Therefore, there should be some legislations that encourages the employability of humans while using AI in their work.

# ECONOMIC SIGNIFICANCE OF HAVING IPR FOR AI

In growth theories of Economics, ideas are considered very important. They are important to innovate or improve upon the existing technology. Ideas improve the technology of production. In the mid-1980s, Paul Romer stated the relationship between Ideas and Economic growth. Basically, ideas are nonrivalrous which implies the presence of increasing returns. Once an idea has been created anyone can take advantage of it. However, if everyone can use that idea, it reduces the incentive of the people to discover new thing as they don't the economic profits from their idea, therefore it becomes very important to establish well defined laws regarding patents and copyrights. These Patents and Copyrights are the legal method through which an inventor can capitalise on their inventions and create some kind of monopoly. Many Economic Historians have this thesis that the formation of intellectual property rights is the reason for the modern economic growth.<sup>5</sup>

Therefore, it becomes very important to establish new intellectual property rights and copyrights that also addresses the protection of AI, as this will increase the incentive to invent more new ideas. This will put people in peace to know that their inventions are safe and they will further innovate more. Lack of a proper legal framework can halt the technological progress and in turn the economic growth. For sustained economic growth, technological progress is the key and to protect the ideas that lead to technological progress thus become increasingly important.

<sup>4.</sup> Bordot F, 'Artificial Intelligence, Robots and Unemployment: Evidence from OECD Countries' (2022)

<sup>5.</sup> Jones C and Vollrath D, 'Introduction to Economic Growth' (1998)

Therefore, intellectual property rights are very important for the economic growth of a country and thus there should be a greater scope for them to include AI.

# ROLE OF INTELLECTUAL PROPERTY RIGHTS (IPRS) IN TECHNOLOGY AND AI

Intellectual Property Rights (IPRs) play an important role in the development of technology and in turn AI. It also plays an important role in the economic growth of a country, a good set of IPRs are very much needed to provide incentive to innovate and grow. They are very important to ensure fair practices take place while innovating and inventing and no one feels the burden of getting their work stolen.

Patents which are a form of IPR gives the exclusive right to the inventor of a product for some time so they can make some economic profits off of their invention. When we talk about patents in AI, it can be interpreted in many ways like the protection of work done by AI or the algorithm or the complex mathematical formulations behind the AI system itself. There is a lot of discussion on the IP regime for AI generated inventions and needs deeper research on how to incorporate them effectively.<sup>6</sup> Integrating AI and IPRs is a complex process and involves a lot of challenges, usually the problem arises in cases where a person designs something with AI, then in that case whether the patent be given to the one who used AI to create the design or to the holder of the AI itself.

Copyright protection is also an important component that is helpful in protecting the original idea; in context of technology, it could be software, database, algorithm etc that needs protection. Original code of a particular application, website etc. in that case copyright laws of a country you own the copyright of that particular code. However, when AI comes in picture it is difficult to analyse the role of copyright in AI. It has the problem as in the case of patents.

Trade secrets are also important in the protection of AI and technology. Usually, companies rely on the trade secret protection when they are unable to get a patent for any particular technology that they developed. Trade secret here could be any business information like marketing strategies or know-how etc.<sup>7</sup>

The intersection of IPRs and AI also raises novel challenges regarding data rights and ownership. As AI systems depend heavily on large datasets for training and development,

<sup>6.</sup> Rassenfosse G, Jaffe A, Wasserman M, 'AI-Generated Invention: Implications for the patent system' (2023)

<sup>7.</sup> Linton K, 'The Importance of Trade Secrets: New Directions in International Trade Policy Making and Empirical Research' (2016)

questions arise about the intellectual property rights associated with these datasets, their compilation, and the derived AI models. This becomes especially complex when considering international data flows and varying jurisdictional approaches to data protection and ownership.

It has become very important that the IPRs and AI are harmonised in such a way as to allow both the room for protection and innovation. The intellectual property rights shouldn't be so strict that there is restriction in the space for innovation. This could lead to decrease in the funds for further research and development which is an undesirable outcome therefore there should be a balance in protecting an idea or creation and further innovation.

#### **CURRENT FRAMEWORK IN INDIA**

# Laws for the protection of an Invention or Idea

First, we will look into the current legal framework that exists in India for protecting an idea or innovation:

- 1. The Indian Patent Act, 1970: Here the patent rights are provided to the inventors for creating a new idea or working on a new technology. In this Act, invention refers to a new product or process that technologically advanced than the existing technology and can be used in the economy.<sup>8</sup>
- 2. The Copyrights Act, 1957: The Act came into effect in 1958 and has been amended many times. This Act protects the original literacy, dramatic, artistic works etc. Artistic work here refers to a painting, a sculptor, a drawing, photograph, or any other artistic craftmanship.<sup>9</sup>
- 3. The Trademarks Act, 1999: A trademark is a symbol or design that a company puts on their products or services, as per this law these trademarks are protected. <sup>10</sup>

# Difficulties in adopting them in the context of AI

1. Patent Act: This Act can impose patent on AI created by a person or company however there are cases where this AI can be used to discover another idea or innovation, in such case it is difficult to know who to give these patent rights, the one who invented the idea or to the one who used AI to discover a new idea. In such cases there is ambiguity regarding the IPR of AI

Page: 4378

<sup>8.</sup> Intellectual Property India, The Patent Act 1970 (India, amended 2015)

<sup>9.</sup> Copyright Office Government of India, The Copyright Act 1957 (India)

<sup>10.</sup> India Code, The Trade Marks Act, 1999

and technology and much proper reforms are needed to address these issues.

- 2. Copyright Act: It is very difficult to address the issue of copyright and AI, there is much ambiguity here and has the problem as in with patents. Under the current copyright Act the AI generated data has yet to be interpreted.<sup>11</sup>
- 3. Trademark: It is very much possible to create a brand name, its design using AI, there many Ais that are there specifically to create design, in that case whether the trademarks be given to the person holding the AI or to the new company that uses the logo created by AI, there is much difficulty in assessing the right course of action.

# Some Other laws with regard to technology and AI

# 1. Digital Personal Data Protection Act, 2023 (DPDP Act)

The Digital Personal Data Protection Act, 2023 (DPDP Act) is an important legislation which has the objective to protect the privacy of an individual while ensuring responsible data processing in India's digital economy. It mostly applies to the processing of personal data that is digital and excludes the anonymous data. It has also introduced certain rights of the individuals called the Data Principal. These rights include an individual's ability to access, correct and erase their data and also to provide their consent or withdraw it. Here data represents the information, facts, concepts, view etc. in such a way that it is interpretable by a person. Personal data here stands for any data that can be used to identify that person with such data. Here we also have Data Fiduciaries which ensures that the data is accurate, keeps the data secure and also ensure its timely disposal. Under this Act there is a Data Protection Board that enforces penalties in case of non-compliance, where the fines can reach up to Rs. 250 crores for breaches. The Act is quite similar to Europe's General Data Protection Regulation (GDPR) in consent standard.

# **2. Designs Act, 2000**

The Designs Act, 2000 is a key legislation in India that provides legal protection for industrial designs. Its main objective is to encourage creativity and innovation by safeguarding the unique aesthetic or visual features of articles. This includes the shape, configuration, pattern, ornamentation, or composition of lines and colours applied to an article, whether in two-

<sup>11.</sup> Drishti Judiciary, 'Position of Artificial Intelligence under Copyright Law' (2023)

<sup>12.</sup> Ministry of Law and Justice, 'The Digital Personal Data Protection Act' (2023)

<sup>13.</sup> Latham&Watkins, 'India's Digital Personal Data Protection Act 2023 vs. the GDPR: A comparison' (2023)

dimensional or three-dimensional form. The Act does not cover functional aspects of a product, focusing solely on its visual appeal.<sup>14</sup>

Under the Act, a design must be original, new, and not previously published or used in any country to qualify for registration. It should be significantly distinguishable from known designs or combinations and must not contain any scandalous or obscene material. Once registered, the design owner is granted exclusive rights for an initial period of 10 years, which can also be extended by an additional 5 years if required. These rights enable the owner to prevent unauthorized copying or imitation of the design.

The Act also has penalties in case of violation or non-compliance. If there is a design that has already been registered then in that case the one who holds the rights can go for legal approach for any damages.

#### LIMITATIONS OF THE IPR SYSTEM IN INDIA

The IPR system in India has made a lot of progress in recent years and continues to improve too. However, there are still some limitations that are yet to be addressed. Some of these limitations are:

# Inefficiency in the patent system

An important limitation is the presence of backlogs that will increase the examination periods for patent applications.<sup>15</sup> This will delay the whole process and will lead to difficulties in moving forward with the technological advancements and might also discourage the innovators in seeking protection from India.

#### **Enforcement Challenges**

The enforcement of Intellectual Property Rights is inefficient and the right holders face many difficulties in addressing the infringements because of the delays in the procedures and also the limited resources.

# Ambiguity in Protection of AI-Generated Works

Currently the legal framework or IPR system does not clearly address the protection of ownership of the work created by Artificial Intelligence which creates a lot of problem and sets

<sup>14.</sup> India Code, Designs Act (2000)

<sup>15.</sup> Sanyal A and Arora A, 'Why India needs to urgently invest in its patent ecosystem?' (2022)

back the advancements in the AI field.<sup>16</sup>

# Limited Awareness and Expertise

Apart from the limitations in the legal framework itself there is also a lack of awareness about the Intellectual Property Rights among the business owners specially among the small sized enterprises. This can lead to underutilization of the laws available for protection.

# Lack of Trade Secret Protection

Unlike the US and Europe India also doesn't have a legal framework for Trade Secrets protection, instead we have contract law. Lack of trade secrets laws is especially for tech firms who have to protect algorithms and data.

#### Challenges in IP Commercialization

Turning ideas into money is often difficult because of too much paperwork and not enough support, which stops people from investing in new inventions.

Addressing these gaps is crucial for fostering an environment that encourages innovation and aligns with global best practices. It is important to enhance the efficiency of the patent office, raising awareness about AI, clarifying legal provisions related to AI-generated works, to have a more effective IPR system in India.

#### 8.7 Data ownership

Artificial Intelligence relies on data and algorithms and therefore it is important to data ownership and usage rights that are properly defined. The data can include information that is available in public or it could be a personal information too although it asks for the question of who exactly owns the data. Personal data belongs to a particular individual and because of Acts like DPDP in India, individuals can control their information as they wish.

#### **CASES AGAINST AI SYSTEMS**

1. Major record labels, including Universal Music Group, Sony Music Entertainment, and Warner Records, have filed lawsuits against AI music startups Suno and Udio. The suits allege these companies' infringed copyrights on a massive scale by using protected works to train their AI models without permission. The Recording Industry Association of America (RIAA)

Page: 4381

<sup>16.</sup> Khanijow, T, 'IP Protection of AI-Generated Works- A Dire Necessity' (2023)

is seeking damages of up to \$150,000 per work.<sup>17</sup> This raises further questions about the ownership and rights over AI content and also the debate between the AI-generated content and copyright law in the creative industries.

2. Artists have won an important step in their lawsuit against AI art generators. A U.S. judge, William Orrick, decided that some key claims about copyright and trademark violations can move forward, especially about Stability AI's tool, Stable Diffusion. The judge said this AI tool might have been trained using copyrighted works without permission, which could lead to copyright violations. This decision could also affect other AI companies using similar methods.

However, the judge dismissed some other claims, like breach of contract, unjust enrichment, and violations of digital copyright rules. The case will now move to the next stage, where artists can investigate how AI companies used their copyrighted materials to train their models.<sup>18</sup>

- 3. Scarlett Johansson took legal action against the AI app "Lisa AI: 90s Yearbook & Avatar" for unauthorized use of her name and likeness in an online advertisement. The app used AI generated representation of Scarlett Johansson for its promotion. This case highlights how the AI content can be used to create content by copying their identity and features like voice without the permission of celebrities.<sup>19</sup> This case highlights the importance of a stricter regulations to deal with the cases of stolen identity.
- 4. The Bombay High Court has provided interim relief to Bollywood singer Arijit Singh in a case against AI platforms that imitated his voice without his permission. Justice R.I. Chagla ruled that Singh's voice, name, image, likeness, and other personal traits are protected under his personality rights and right to publicity. The court stated that using a celebrity's voice without consent through AI tools is a violation of these rights and acknowledged the risks performers face from technological misuse.

The court's order prevents the defendants from using Singh's personal attributes without his consent, whether through AI technology, online platforms, or in merchandise. There were also some defendants that were instructed to remove the domain names that contained his name.<sup>20</sup> This case highlights how AI can be used to replicate human aspects like voice and also looks

<sup>17.</sup> Dhameliya S, 'Records Labels sue AI platforms making Music: Universal, Sony, Warner v/s Suno, Udio' (2024)

<sup>18.</sup> Cho W, 'Artists Score Major Win in Copyright Case Against AI Art Generators' (2024)

<sup>19.</sup> Cho W, 'Scarlett Johansson's AI Legal Threat Sets Stage for Actors' Battle With Tech Giants' (2024)

<sup>20.</sup> Mukhopadhyay S, 'Arijit Singh vs AI: Bollywood singer wins case against artificial intelligence mimicking his voice to create songs' (2024)

into the importance of further having regulations that can protect artists from such situations.

#### IPR LAWS AROUND THE WORLD

US

The American Intellectual Property Law Association (AIPLA) discusses the complexities of granting intellectual property (IP) rights to artificial intelligence systems, particularly concerning the recognition of AI as inventors. The U.S. Patent and Trademark Office (USPTO) and the U.S. Copyright Office currently define an inventor as a "natural person," thereby excluding AI from holding inventorship status. This interpretation is based on statutory language in Title 35 of the U.S. Code, which uses terms like "whoever," "himself," and "herself," implying human inventors.<sup>21</sup>

However, there are challenges to this human approach as AI is being significantly used in further advancing innovation. There is a need for a nuanced approach to the IP laws and recognising that AI can lead to innovation while acknowledging the important role humans in these innovations. So, there is a need for evolving the intellectually property laws according to these advancements in the AI.

This also aligns with what USPTO said which is that inventions where AI has been used can be patented if there has been significant contribution to that innovation by a person too.

The debate over AI inventorship continues to evolve, with various stakeholders advocating for policies that balance the promotion of innovation with the protection of human inventors' rights. As the Artificial Intelligence advances, the legal framework of intellectual property rights also needs some adjustments that can accommodate the changing dynamics in innovation.

# 1. Copyright Law and AI

Under U.S. copyright law, works must be created by a human author to be eligible for protection. The U.S. Copyright Office has explicitly stated that AI-generated works without significant human input are not protected under copyright law. However, if a human provides creative direction or input in generating an AI-produced work, the human may claim copyright for the aspects they contributed.

<sup>21.</sup> Karpinia R, 'Intellectual Property Rights of Artificial Intelligence Inventors'

# **Key Cases:**

- The US copyright office ruled in 2023 that the images created by Ais like Midjourney cannot be copyrighted unless authorship of a human is involved.
- The ongoing case of *Thaler v. Perlmutter* examines whether AI-generated works should be eligible for copyright, focusing on the role of human involvement.<sup>22</sup>

#### 2. Patent Law and AI

U.S. patent law allows for the protection of inventions and innovations, but it requires a "natural person" to be listed as the inventor. This has created challenges in cases where AI systems independently generate patentable innovations. Courts and the U.S. Patent and Trademark Office (USPTO) have consistently denied patent applications listing AI as the inventor, emphasizing that only humans can be recognized as inventors.

#### 3. Trade Secret Law and AI

Trade secrets, protected under the Defend Trade Secrets Act (DTSA), allow the owner of the trade secrets to sue in federal court if its trade secrets have been misappropriated.<sup>23</sup>

#### Europe

#### 1. Copyright Laws

Under European Union (EU) copyright law, the idea or innovation should be original and reflect the owner's own intellectual creation, which means that there should be human aspect in that invention. This excludes AI-generated works from copyright protection unless a human significantly contributes to their creation.

Exceptions for Text and Data Mining (TDM): The EU's Directive on Copyright in the
Digital Single Market (DSM Directive) introduced TDM exceptions that allow AI
developers to analyse datasets for training models, provided the data is lawfully
accessed.<sup>24</sup>

<sup>22.</sup> Sokler B, Hecht A and Fjeld C, 'Judge Rules Content Generated Solely by AI is Ineligible for Copyright — AI: The Washington Report' (2023)

<sup>23.</sup> Defend Trade Secrets Act (2016)

<sup>24.</sup> Policy department for citizens' rights and constitutional affairs, 'The Exception for Text and Data Mining (TDM) in the Proposed Directive on Copyright in the Digital Single Market - Legal Aspects' (2018)

#### 2. Patent Laws

AI systems cannot currently be recognized as inventors under European patent law. The European Patent Office (EPO) requires a human inventor to be named in patent applications.<sup>25</sup>

### 3. Artificial Intelligence Act

The European Union's proposal of Artificial Intelligence Act (AIA) aims to regulate AI technologies based on risk levels. It mainly focuses on the transparency and accountability; however, it can also impact the intellectual property rights by requiring information on data and algorithms. This could be helpful in enhancing the transparency in IP disputes that involves AI- generated content.<sup>26</sup>

# Japan

As in many countries there has been a lot of discussions on the issue of AI and copyright in Japan too. The 2018 amendment to Japan's Copyright Act increased the scope of defences which allowed the limited exploitation of the copyrighted works without any authorization with the aim to promote innovation. Unlike the U.S. "fair use" defense, Japan's Copyright Act still relies on specific and narrower defenses. The amendment introduced Article 30-4, which provides a defense for acts with a "Non-Enjoyment Purpose," meaning copyrighted works can be used without authorization if the purpose is not to personally enjoy or allow others to enjoy the work's thoughts or sentiments. This defense offers some flexibility for new technological uses compared to pre-amendment rules.

However, the exception under Article 30-4 is limited by the "Article 30-4 Proviso," which does not allow the use that could potentially harm the copyright owner's interests, taking into account the purpose of the work and the circumstances of its use. The amendment therefore, aims to create a balance between fostering innovation while also protecting the rights of the creators.

The recent report looks into how this defense applies to potential copyright infringement during generative AI development. It examines both the Non-Enjoyment Purpose Requirement and the Article 30-4 Proviso, analysing scenarios where such uses might or might not qualify as exceptions.

<sup>25.</sup> European Patent Office

<sup>26.</sup> EU Artificial Intelligence Act

#### **Article 30-4 Proviso:**

The report on AI and Copyright Issues by Japanese Government NO&T IP Law Update analyses situations where the Non-Enjoyment Purpose Requirement under Article 30-4 of Japan's Copyright Act applies, as well as cases where the provision does not apply due to unreasonable prejudice to the copyright owner's interests. It focuses on whether specific actions conflict with the copyright owner's market or hinder future sales opportunities. Four key scenarios are addressed:

# 1. AI Outputs Similar in "Idea" to Copyrighted Works

The generation of AI outputs that reflect only the idea of an existing copyrighted work, rather than its expression, does not constitute copyright infringement. Even if AI-generated outputs reduce the demand for the original creator's works due to similarity in ideas, this is not considered unreasonable prejudice because ideas are abstract concepts that cannot be monopolized under copyright law.

# 2. Reproduction of Database Works for Data Analysis

If a database is organized in a way that facilitates data analysis and is commercially available, reproducing it for AI training without paying for access may unreasonably harm the copyright owner's interests. This includes databases with creative organization or systematic construction of information. For instance, if a database is sold with an API for organized data extraction, reproducing its content without authorization would conflict with its market.

## 3. Technical Measures to Prevent Reproduction

When copyright owners implement technical safeguards to prevent reproduction of their database works for AI training, bypassing these measures and reproducing the data may constitute unreasonable prejudice. This applies especially if the database is intended for sale or licensing and the collected data is critical for analysis.

# 4. Reproduction of Infringing Copies (e.g., Pirated Works)

While the report does not necessarily apply Article 30-4 in this particular scenario, it points to the fact that using the pirated work knowingly can increase the risk of liability. If the AI outputs closely resemble copyrighted works, this could further exacerbate the infringement.

In summary, Article 30-4 provides some flexibility for exploiting copyrighted works in AI development, but its application is limited by the potential harm to the copyright owner's market or sales channels. This framework attempts to balance innovation in AI with the protection of creators' rights.<sup>27</sup>

# WHAT INDIA CAN LEARN FROM THEM?

Referencing from the laws that exist in the US, Europe and Japan and some other countries India can work upon its own laws and create a room for improvement. One thing that can be adopted in the legal framework for protection in India is the protection of trade secrets through Trade Secret Laws which is effective and comprehensible. Currently India has contract law (Indian Contract Act, 1872) in its place, however it is not as effective because of the lack of clarity. There are also enforcement challenges which also needs to be addressed. Another thing that can be improved upon is the clarity in who will actually hold the patent or copyright for a particular invention or work. This clarity will immensely help in improving the IPR laws regarding AI.

#### **CONCLUSION**

In this research we look into the need for implementing stricter laws for protecting technology and look into the patents and copyright laws for AI based content. We have looked into the points for the importance of IPR in AI and the significance it holds especially to maintain transparency and the protection of individual rights. An important significance is in economic terms according to which having proper IPRs is better for economic growth as it will enforce people to further advance in technological aspects and since AI is considered to be the next big thing; for its further advancements having proper IPR laws is very important. We also looked into the various protection laws that are there in India including the DPDP Act and the Design Act and how there are many challenges in incorporating them with AI. We have also looked into some limitations in the IPR system in India specially in context of India. These limitations mainly include ambiguity in protecting the work created by Artificial Intelligence. There are also various cases against AI by artists and firms for copying or imitating their work. These cases further demand a deep look into incorporating AI in IPRs and what could be the implications. Unlike the US and Europe India doesn't have Trade Secrets Law but instead has

Page: 4387

<sup>27.</sup> Tosaki K, Tajima A and Komiya C, 'Report on AI and Copyright Issues by Japanese Government-NO&T IP Law Update' (2024)

a contract law. An important aspect of protection laws in Japan is Article 30-4 which allows the exploitation of copyrighted work under certain conditions.

The overall conclusion that can be drawn is that since AI advancements are moving fast forward there is a need to accommodate these evolving changes with the current legal framework on protecting an invention since, with Artificial Intelligence there is a greater scope of even more exponential growth in the technology. However there many challenges that arises when forming such regulations especially when deciding on who will own the rights of an innovation when it is assisted by Artificial Intelligence. Whether it should be the person who used AI to create that idea or the inventor of the AI itself, there is a lot of ambiguity in this field. An important conclusion we draw is that there is a need to balance protection and innovation. If the laws regarding AI are too strict it can create some hindrances in innovation which are not as desirable and also how important IPRs are for the growth both in technological and economical aspects. It is important to have better IPRs in regards to AI so that there is incentive to innovate further.