# EVALUATING THE LEGAL FRAMEWORK FOR PATENT PROTECTION OF AI-GENERATED INVENTIONS IN THE INTELLECTUAL PROPERTY ACT NO. 36 2003 SRI LANKA

BY

MUHAMMED SAMRIN JAILABDEEN

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

2026

# EVALUATING THE LEGAL FRAMEWORK FOR PATENT PROTECTION OF AI-GENERATED INVENTIONS IN THE INTELLECTUAL PROPERTY ACT NO. 36 2003 SRI LANKA

BY

MUHAMMED SAMRIN JAILABDEEN

A dissertation submitted in fulfillment of the requirements for the degree of Master of Comparative Laws

Ahmad Ibrahim Kulliyyah of Laws
International Islamic University Malaysia

JANUARY 2026

# ABSTRACT

This study discusses how Sri Lanka's Intellectual Property Act 36 of 2003 protects patents related to AI-generated inventions and its underlying ideology. A doctrinal approach was used for identifying legal loopholes in the current legal system, especially concerning the rapid advancement of technological change. Sri Lanka's IP law adheres to a traditional framework for patents, which focuses on human-centered inventorship, but it remains silent on AI-generated outputs. This gap makes it difficult to determine ownership, responsibility, and patentability. This study shows that Sri Lanka should modernize its IP related to patent regulation. Further, it identified a systematic gap in the law when the U.S., UK, EU, and South Africa handled similar cases in their jurisdiction. Hence, the study proposes a two-tiered method that separates the "inventor," which is the artificial intelligence, and the "implementor," who is a person or legal organization that takes on responsibility for commercialization and liability. Additionally, to address the procedural and ethical challenges, this method should adhere to the guidelines established by the World Intellectual Property Organization (WIPO) and strike a balance between recognizing AI's contributions and establishing legal accountability. Furthermore, this study illustrates how Sri Lanka can foster innovation, attract investment, and align its intellectual property law with global best practices in the AI era by addressing gaps in ownership, liability, and ethical protections.

## خلاصة البحث

تتناول هذه الدراسة كيفية حماية قانون الملكية الفكرية السريلانكي رقم 36 لعام 2003 للبراءات المتعلقة بالاختراعات الناتجة عن الذكاء الاصطناعي والأيديولوجية الكامنة وراءه. تم استخدام منهج عقائدي لتحديد الثغرات القانونية في النظام القانوني الحالي، خاصة فيما يتعلق بالتطور السريع للتكنولوجيا. يلتزم قانون الملكية الفكرية في سريلانكا بالإطار التقليدي للبراءات، الذي يركز على المخترع البشري، لكنه يظل صامتًا بشأن المخرجات الناتجة عن الذكاء الاصطناعي. هذه الفجوة تجعل من الصعب تحديد الملكية والمسؤولية وقابلية الحصول على البراءة. تظهر هذه الدراسة أن سريلانكا بحاجة إلى تحديث قوانين الملكية الفكرية المتعلقة بتنظيم البراءات. كما أشارت الدراسة إلى وجود فجوة منهجية في القانون عند مقارنة كيفية تعامل الولايات المتحدة والمملكة المتحدة والاتحاد الأوروبي وجنوب إفريقيا مع قضايا مماثلة في نطاق اختصاصها. بناءً عليه، تقترح الدراسة منهجًا ذا مستويين يفصل بين "المخترع" وهو الذكاء الاصطناعي، و"المنفذ" وهو شخص أو كيان قانوني يتولى مسؤولية التسويق وتحمل المسؤولية القانونية. بالإضافة إلى ذلك، ولمعالجة التحديات الإجرائية والأخلاقية، يجب أن يلتزم هذا المنهج بالإرشادات التي وضعتها المنظمة العالمية للملكية الفكرية (WIPO) وأن يوازن بين الاعتراف بمساهمات الذكاء الاصطناعي وتحديد المسؤولية القانونية. علاوة على ذلك، توضح هذه الدراسة كيف يمكن لسريلانكا تعزيز الابتكار وجذب الاستثمار ومواءمة قانون الملكية الفكرية لديها مع أفضل الممارسات العالمية في عصر الذكاء الاصطناعي من خلال معالجة الفجوات في الملكية والمسؤولية والحماية الأخلاقية.

# APPROVAL PAGE

I certify that I have supervised and read this study and that, in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Comparative Laws.

……
Ida Madieha Abdul Ghani Azmi
Supervisor

I certify that I have read this study and that, in my opinion, it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Comparative Laws.

……
Suzi Fadhilah Ismail
Examiner

……
Mahyuddin Daud
Examiner

This dissertation was submitted to the Department of Civil Law and is accepted as a fulfillment of the requirement for the degree of Master of Comparative Law

……
Zati Ilham binti Abdul Manaf
Head, Department of Civil Law

This dissertation was submitted to the Ahmad Ibrahim Kulliyyah of Laws and is accepted as a fulfillment of the requirement for the degree of Master of Comparative Laws.

……
Ida Madieha Abdul Ghani Azmi
Dean, Ahmad Ibrahim Kulliyyah of Laws

## DECLARATION

I hereby declare that this dissertation is the result of my investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Muhammed Samrin Jailabdeen

Signature…… Date……

## INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

## DECLARATION OF COPYRIGHT AND AFFIRMATION OF FAIR USE OF UNPUBLISHED RESEARCH

**EVALUATING THE LEGAL FRAMEWORK FOR PATENT PROTECTION OF AI-GENERATED INVENTIONS IN THE INTELLECTUAL PROPERTY ACT NO. 36 2003—SRI LANKA.**

I declare that the copyright holder of this dissertation is jointly owned by the student and IIUM.



No part of this unpublished research may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission of the copyright holder, except as provided below.

1. Any material contained in or derived from this unpublished research may only be used by others in their writing with due acknowledgement.

2. IIUM or its library will have the right to make and transmit copies (print or electronic) for institutional and academic purposes.

3. The IIUM library will have the right to make, store in a retrieval system, and supply copies of this unpublished research if requested by other universities and research libraries.

By signing this form, I acknowledge that I have read and understand the IIUM Intellectual Property Rights and Commercialization policy.

Affirmed by Muhammed Samrin Jailabdeen

…… ……

Signature Date

*This thesis is dedicated to my late father for laying the foundation of what I have turned out to be in life.*

# ACKNOWLEDGEMENTS

All praise is due to Allah, Alhamdulillah, for granting me the courage, strength, and patience to successfully complete this dissertation. Peace and blessings be upon the Prophet Muhammad (SAW), who was sent as a mercy to all of humanity. I would like to express my deepest gratitude to my respected supervisor, Prof. Ida Madieha, for her invaluable guidance, encouragement, and support throughout this journey. Her time, insightful discussions, and unwavering assistance have been instrumental in the completion of my dissertation.

I am also profoundly grateful to my late father, Jailabdeen (Allah grant him Jannatul Firdaws), for his love and inspiration, and to my beloved mother for her constant prayers and support during every step of this journey. Furthermore, my heartfelt thanks go to my wife, Farhath Furkan, and my daughter, Leena Zamrin, whose encouragement and cheerfulness have been a continuous source of motivation for me.

To all my family members, friends, and everyone who contributed directly or indirectly to this accomplishment, I extend my sincere appreciation. May Allah reward you all abundantly.

# TABLE OF CONTENTS

# LIST OF STATUTES, CONVENTIONS AND INTERNATIONAL TREATIES.

Code of Intellectual Property Act 1979 (Act 52).

Intellectual Property Act 2003 (Act 36).

United States Code (35).

Convention on the Grant of European Patents (European Patent Convention) (adopted 5 October 1973, entered into force 7 October 1977), 1065 UNTS 199.

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) (adopted 15 April 1994, entered into force 1 January 1995), 1869 UNTS 299.

Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016), UNTS.

# LIST OF CASES

# CHAPTER ONE
# INTRODUCTION

## 1.1 BACKGROUND OF THE STUDY

Artificial intelligence (AI) has transformed industries and greatly impacted them, including Intellectual Property (IP) creation and innovation. AI is expected to become an integral part of human daily life in the foreseeable future.[1] AI has greatly advanced in generating creative and original solutions to complicated tasks, such as computer coding, software design problems, and others. This progress has led to an increase in the number of AI-generated inventions in the industrial markets.[2] However, the current legal regimes concerning intellectual property rights, especially patent protection, are confronted with issues taking into account and recognizing AI-generated inventions, which should be the subject matter of patent law theses.[3]

Patents play an important role in encouraging inventors to invest in innovation by granting an exclusive right over their inventions. These rights promote investment in research and development and also offer a legal basis for bringing new inventions to the market. Patents significantly contribute to innovation by creating a safe environment

[1] Hayleigh P. Bosher, Peter Westenberger, Oleksandr Gurgula, and Fang Wang,"WIPO Impact of Artificial Intelligence on IP Policy: Response from Brunel Law School & Centre for Artificial Intelligence" (2020),<https://www.wipo.int/documents/d/frontier-technologies/docs-en-artificial-intelligence-call-for-comments-org_brunel.pdf >(accessed 6 June 2023).
[2] Daria Kim, "'AI-Generated Inventions': Time to Get the Record Straight?" *GRUR International*, vol. 69, no. 5 (2020): 443–456.
[3] Douglas R. Nemec and Laura M. Rann, "AI and Patent Law: Balancing Innovation and Inventorship," Skadden Insights,<https://www.skadden.com/insights/publications/2023/04/quarterly-insights/ai-and-patent-law> (accessed 5 July 2023).

where investors and researchers are stimulated to actively participate in the industry.[4] However, when it comes to an AI-generated patent, the market questioned its legal status and the ethical implications of granting patent protection for it. The current legal models are based on classical patent laws, which have been developed to protect creations done by traditional humans, but the emergence of AI as an inventor poses a challenge to these established legal frameworks.[5]

The patent about AI is probably one that should be mentioned in two different paradigms because it involves two different sorts of AI inventions: the AI-assisted and the AI-generated inventions. While they are both created by AI, there is a big difference in the level of human involvement regarding creating an innovation. The AI-assisted invention was created with a substantial level of human intervention, such as the development of new drugs. In such cases, AI acts as a tool to augment human capabilities, enabling more efficient drug discovery processes and enhancing the accuracy of predictions. There is no issue related to this type of invention that can generally be eligible for patent protection under the existing laws.

However, AI-generated inventions are different from previous ones. The patent was created with insignificant human involvement, where the AI system independently generates the invention, even though some scholars argue it is still a myth,[6] but a lot of development and research are ongoing in this field. An example of this is the case of

[4] InventIP Legal Services LLP, "Role of Patents in Promoting Innovation and Economic Growth," LinkedIn, 19 April 2023, <https://www.linkedin.com/pulse/role-patents-promoting-innovation-economic/ > (accessed 6 June 2023).
[5]Francesco Banterle, "Ownership of Inventions Created by Artificial Intelligence," paper presented at AIDA 2018 (2018), available at SSRN, <https://papers.ssrn.com/abstract=3276702>.
[6] John Villasenor, "AI Inventions: Policy Options and a Path Forward," policy report, *Brookings Institution* (2023), <https://www.brookings.edu/articles/ai-inventions-policy-options-and-a-path-forward/>.

DABUS (Device for the Autonomous Bootstrapping of Unified Sentience), an AI system that has been trying to get inventorship for its product. However, currently, most countries' patent laws require that the inventor be a natural person. Since AI systems are not recognized as legal persons, they cannot be named inventors.[7] As a result, AI-generated inventions are not protectable under traditional patent laws. This has raised significant debates and discussions within the legal and intellectual property communities about the need to adapt existing laws to accommodate AI-generated inventions.[8]

Sri Lanka, being a member of the World Intellectual Property Organization (WIPO)[9] and a signatory to international agreements on intellectual property (IP), such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), has a responsibility to ensure sufficient patent protection for innovative technologies. The Intellectual Property Act No. 36 of 2003 serves as the primary legislative framework for intellectual property rights in Sri Lanka, including patents.[10] However, the Act does not explicitly cover the distinct challenges that arise from artificial intelligence,[11] neither AI bots[12] or AI-generated patents. The focus of the system is primarily based on human

[7] IbÎd

[8] Pheh Hoon Lim and Phoebe Li, "Artificial Intelligence and Inventorship: Patently Much Ado in the Computer Program," *Journal of Intellectual Property Law and Practice*, vol. 17, no. 4 (2022): 376–386.

[9] World Intellectual Property Organization, "Member States," <https://www.wipo.int/members/en/> (accessed 7 July 2023).

[10] Nishantha Sampath Punchihewa, "Intellectual Property in Tourism and Culture in Sri Lanka: A Study" (unpublished Master's thesis, 2017), <https://www.wipo.int/export/sites/www/ip-development/en/agenda/docs/study_ip_in_tourism_and_culture_sri_lanka.pdf >(accessed 6 June 2023).

[11] Fathima Zameera, "Adequacy of Intellectual Property Rights in Relation to Artificial Intelligence: A Case Study of Sri Lanka," *Academia.edu*, 15 June 2021, <https://www.academia.edu/49252821/Adequacy_of_Intellectual_Property_Rights_in_relation_to_Artificial_Intelligence_A_Case_Study_of_Sri_Lanka> (accessed 6 July 2023).

[12] Aparrajitha Ariyadasa, "A Challenge from Humanoid Bots: An Analysis of the Legal Regime in Sri Lanka on Artificial Intelligence, "conference paper presented at ICOBI 2019, available at SSRN, <https://ssrn.com/abstract=3484724 >.

inventors and the challenges that come from it. Further, by virtue of Section 67(2),[13] the Act does not acknowledge AI as a legally recognized inventor by mentioning the word "person". The existence of this legal gap raises concerns about whether the current patent framework in Sri Lanka is sufficient and flexible enough to effectively protect and encourage AI-generated inventions, along with the protection of human inventors' inventions.

One of the key considerations in addressing the patentability of AI-generated products is that artificial intelligence has become a widely used mechanism and will become an integral part of human life in the future that humankind cannot be separated from it.[14] Therefore, not only Sri Lanka but also other countries may face a problem with the AI-generated patents. This is because the legal system may be forced to adopt the inventorship of AI-generated patents in the future; hence, a precaution is better. Vint Cerf mentioned, "*...we need to be thoughtful about how these technologies are implemented and used, but, on the whole, I see these as constructive*".[15]

The current legal framework for patent protection in Sri Lanka does not adequately capture the collaborative nature of AI-generated inventions, where the contributions of both humans and AI systems are intertwined. This creates a situation where individuals with limited knowledge of AI may be able to obtain patents without achieving the same level of innovation as those who have dedicated their lives to a particular discovery. This indicates

[13] Intellectual Property Act 2003 (Act 36)
[14] Nadia Batok, "Artificial Intelligence Has Changed Our World," *Wall Street International*, vol. 30 (2020).
[15] Janna Anderson and Lee Rainie, "Improvements Ahead: How Humans and AI Might Evolve Together in the Next Decade," *Pew Research Center: Internet, Science & Tech*, (2018), <https://www.pewresearch.org/internet/2018/12/10/improvements-ahead-how-humans-and-ai-might-evolve-together-in-the-next-decade/?gad_source=1&gad_campaignid=22378837192&gbraid=0AAAAA-ddO9FgJEop5eKsk6VaUiBPv3evH&gclid=Cj0KCQiA9t3KBhCQARIsAJOcR7x5aksxmG3gDqZfWpMDm6R0RdtYLd8JQlUvyApgAp0el2UO3BpvRD8aAqlUEALw_wcB> (accessed 6 June 2023).

that approving AI as an inventor would not solve the legal issue about the patent when moral values are also a necessary part to be considered in the legal field. Hence, the current patent laws in Sri Lanka should be reviewed, and without further delay, possible amendments or a fresh legislation should be considered.

Consequently, this research aims to delve into the issue of patentability concerning AI-generated inventions and explore alternative legal frameworks for distinguishing them from naturally human-generated inventions. The first chapter will sketch the legal status of AI-generated inventions under international patent laws, resulting in a deep understanding of the global background. The second chapter will address the particular complications in AI patents under the Intellectual Property Act No. 36 of 2003, Sri Lanka. Finally, the research will propose potential solutions to this emerging problem within the legal sector, drawing heavily on expert opinions and insights from the legal profession.

### 1.2 STATEMENT OF THE PROBLEM.

The rapid advancement of artificial intelligence (AI) has led to the emergence of AI-generated inventions, which are inventions made with minimal human intervention solely by AI systems.[16] However, the existing legal framework for patent protection, as outlined in the Intellectual Property Act No. 36 of 2003 in Sri Lanka, does not explicitly address the distinction between patents of autonomous AI-generated inventions and human inventions, but rather merely mentions the inventor[17] as "person" in Section 67(2) of IPA 2003. The

[16] World Intellectual Property Organization, "WIPO Conversation on Intellectual Property (IP) and Artificial Intelligence (AI)," (2019).
[17] Intellectual Property Act 2003 (Act 36), s 67.

European Patent Office mentions that the inventor means a natural person or natural human being.[18] Thus, no specific provision or clause addressing AI can be found in the Intellectual Property Act No. 36 of 2003 (IPA 2003).

Additionally, the terms "computer program" or "computer code" in the interpretation part and Section 6 of the IPA do not encompass AI. However, other international jurisdictions such as Federal Court of Australia clearly interpreted that computer programs or codes are distinct from AI, as AI possesses advanced creativity and functionality without significant human intervention, unlike traditional computer programs.[19] This lack of clarity may raise significant legal and practical challenges[20] in adequately protecting and incentivizing patents in the future.

Hence, the problem at hand is twofold. Firstly, the current legal framework primarily focuses on human inventors and does not explicitly acknowledge AI as a legal inventor. Secondly, recognizing AI as an inventor may cause a negative impact on the moral rights of traditional humans and human inventors.[21] This is due to the fact that AI patents encompass both AI-assisted and AI-generated inventions. Further, when it comes to defining AI inventions, it is crucial to make a clear distinction between 'AI-assisted ' and 'AI-generated ' inventions. AI-assisted inventions involve collaboration between AI systems and humans, with the human contribution often playing a more significant and central role. On

[18] Mimi S. Afshar, "Artificial Intelligence and Inventorship — Does the Patent Inventor Have to Be Human?" *Hastings Science & Technology Law Journal*, vol. 13 (2022): 55.
[19] Courtney White and Rita Matulionyte, "Artificial Intelligence Painting the Bigger Picture for Copyright Ownership," SSRN Working Paper No. 3498673 (2019), <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3498673>.
[20] Ariyadasa, "A Challenge from Humanoid Bots," 260.
[21] Ryan Abbott, "The Artificial Inventor Project," *WIPO Magazine*, no. 6 (2019), <https://www.wipo.int/en/web/wipo-magazine/articles/the-artificial-inventor-project-41111>

the other hand, AI-generated inventions are capable of independent creation or execution without direct human intervention.

However, it is important to note that currently, all AI-related inventions still rely on varying degrees of human input, making complete automation of AI inventions a misconception or myth. It is a possibility that in the future, AI-generated inventions may be capable of functioning autonomously without any human intervention. Therefore, when it comes to the legal framework for AI-related inventions patents, copyrights, copyrights, or others, the legal professions are obliged to consider this part as well. Hence, the main problem in the research's study is not only indicating that AI should be recognized as an inventor but also that soon, if the IPA 2003 recognizes AI as an inventor, it might violate the legal norms and traditional human rights because of two sub-issues, which are liability and taking advantage.

For the first sub-issue, an important consideration arises regarding how an AI system would fulfill the rights and obligations typically associated with inventorship, such as signing the inventor's oath or declaration required for a patent application, transferring patent ownership to a third party, or providing testimony under oath during legal proceedings involving disputes over inventorship.[22] For the second sub-issue, patent law traditionally acknowledges the significance of human ingenuity and the inventive process, which involves years of research, experimentation, and problem-solving.

Allowing AI systems to be recognized as the sole inventors may undermine the principles of fairness and merit that underpin the patent system, potentially leading to a distorted allocation of intellectual property rights, such as scholars spending their time to

[22] Villasenor, "AI Inventions: Policy Options and a Path Forward."

create an invention and they may end up successful or vice versa, but if anyone invented a patent solely by the help of AI without possessing any knowledge and claimed that the ownership belongs to him, this looks unjust, as one who has full potential or knowledge would be disregarded over one who has a little knowledge of computers or AI.[23]

Therefore, a vigilant consideration should be made in IPA 2003 to avoid future problems and confusion. To do that, proper research should be carried out through the consideration of scholars' opinions in the field.

## 1.3 RESEARCH QUESTIONS

1) What is the legal position of AI-generated inventions in international patent law?
2) Whether the patent generated by artificial intelligence is patentable under the Intellectual Property Act No. 36 of 2003- Sri Lanka.
3) Would comparing international legal standards of patent law and legal scholars' opinions in IPA 2033 regarding patent protection bring an appropriate legal and moral solution for Sri Lankan law?

## 1.4 RESEARCH OBJECTIVES

1) To examine the legal position of AI-generated inventions in international patent law by analyzing relevant international treaties, agreements, and guidelines.

[23] Alexandra George and Toby Walsh, "Artificial Intelligence Is Breaking Patent Law," *Nature* 605, no. 7911 (2022): 616–618, <https://doi.org/10.1038/d41586-022-01391-x>.

2) To assess the applicability and legal position of the Intellectual Property Act 2003 for AI-generated patents.
3) To compare the international legal standards of patent law with the current provisions in Sri Lankan law regarding patent protection to identify gaps, inconsistencies, or areas where the Sri Lankan legal framework may require improvement or amendment.

## 1.5 HYPOTHESIS

As such, there is a need to reconsider the existing patent laws and explore potential amendments or the enactment of a new Act in Sri Lanka to address this distinction, until some people may not be able to take advantage of AI in relation to patent inventorship or some amendments should be made to the Intellectual Property Act No. 36 of Sri Lanka regarding the patent generated by artificial intelligence. Further, the new Act or the amendments should consider the legal transplantation from other countries, specifically in patents for AI-generated inventions.

## 1.6 RESEARCH METHODOLOGY

The research utilizes a qualitative methodology based on the doctrinal approach, meaning it focuses on comprehending the quality and characteristics of certain phenomena. In this instance, the research materials being integrated were related to artificial intelligence, AI-generated patents, issues and solutions regarding artificial intelligence, and its protection under the Intellectual Property Act 2003 No. 36 of Sri Lanka. The researcher accumulated information from various sources, such as legislative documents from numerous countries

and international treaties, especially the United States Patent and Trademark Office (USPTO) and the European Patent Office (EPO), WIPO material, and drafted bills from other countries.[24]

Further, legal academic writings took a big part in this research, especially opinions regarding AI-generated patents, legal issues, and argumentative points on the grounds of what are the prominent actions that should be taken to solve the issue and what development should be made to embody the Intellectual Property Act 2003 in a near-perfect way regarding the legal frame for patent protection?

The researcher constructed the research based on an inductive reasoning approach; therefore, the main focus of the researcher was to analyze and gather data and examine the legislations from other countries or international treaties such as EPO or USPTO or Australian Patent law that have established rules or drafted legislations or decided cases regarding the AI-generated patents using the analogical method; hence, the researcher may be able to identify the similarities between the legal framework in those countries or conventions and the situation in Sri Lanka, where there is a lack of specific legislation for AI-generated patents. Subsequently, by applying inductive reasoning, the researcher may generalize from the specific instance of those legislations and cases to make a broader conclusion, which may fit the specific legal, social, and economic conditions of Sri Lanka.

Hence, the research will examine the subject matter from various angles. Firstly, it will provide a general overview of AI, including the different types of AI and the distinction between AI-assisted patents and AI-generated patents. Secondly, it will explore the legal

[24] Tarso Mesquita Machado and Eduardo Winter, "Artificial Intelligence and Patents in Brazil: Overview on Patentability and Comparative Study on Patent Filings," *World Patent Information*, vol. 72 (2023): 102177.

issues related to AI-generated patents, such as the question of patent inventorship and the moral and legal disputes that may arise from recognizing AI as an inventor under the eyes of international laws and the Intellectual Property Act No. 36 of 2003 (IPA 2003). Thirdly, it will reference relevant legislation from other countries or international conventions, along with their preambles, relevant case law, and the ratio decidendi of those cases. Additionally, the research will identify any gaps or inadequacies within the Intellectual Property Act of 2003 in Sri Lanka, specifically examining the provisions or interpretations of the Act that may require improvement. Finally, the research will propose potential suggestions or recommendations to enhance the Intellectual Property Act of 2003 in order to effectively address the identified issues in a comprehensive and satisfactory manner, as deemed appropriate by the researcher.

## 1.7 SIGNIFICANCE OF THE RESEARCH.

The research may hold significant importance in several ways; namely, it may help to bring the emerging issue to the spotlight. The rapid advancement of AI technology ignited numerous questions in the legal system. One of them is whether AI-generated patents can be patentable. Despite the fact that the legislation is limited and the present intellectual property law of Sri Lanka does not specifically provide a solution for the issue of AI patents, the below work fills a vital gap by reflecting on the legal regime and suggests possible reforms for a more comprehensive protection and incentive making towards AI-generated inventions in Sri Lanka without prejudice to traditional human rights and morals. In addition, the results and suggestions based on this study could be of some use to Sri Lankan policy-makers and lawmakers. Further, the research findings and recommendations may provide

valuable insights for policymakers and legislators in Sri Lanka. The proposed amendments or new legislation can shape the legal framework to address the unique challenges posed by AI-generated patents, and it may encourage researchers to identify the emerging AI problem and discover solutions for it, whether it is AI-generated patents or other fields.

Apart from that, examining the patent law in the IPA 2003 and comparing it with other jurisdictions will draw on international experience and the best practice for the issue. This comparative analysis may contribute to the development of a well-informed and comprehensive legal framework in Sri Lanka, considering global standards and approaches to the patentability of AI-generated patents. Further, it may also help to promote AI technology in Sri Lanka and encourage the young generation to do more research on this emerging field.

## 1.8 SCOPE OF THE STUDY

The research shall be limited to discussing the matter relating to artificial technology patents only; traditional human patent matters shall not be addressed. The primary emphasis of the research will be on AI-generated patent issues, while AI-assisted patents will be addressed, but not as the main focus. The geographical limitation of the research will center on the examination of patents within the Sri Lankan intellectual property law context, specifically the Intellectual Property Act No. 36 of 2003. However, for the purpose of comparison, the research will also reference patent laws and practices in other jurisdictions.

## 1.9 LITERATURE REVIEW

The field of artificial intelligence has witnessed significant growth over the years. In 2020, the AI market was valued at 12.5 billion USD; by 2023, its value skyrocketed to 136.55 billion USD.[25] Artificial intelligence's rapid and unpredictable development has resulted in many legal issues. This ongoing cycle necessitates continuous engagement from the legal profession to find appropriate legal solutions. Further, to maintain social and economic order, it is imperative to establish a well-functioning ecosystem that effectively addresses these challenges.[26] Therefore, the researcher has organized the sources of discussion using a pyramid method. To begin with, the researcher will address materials related to AI as a general topic and then move to specific materials concerning Sri Lankan intellectual property (IP) law and patents. Lastly, the researcher will focus on materials specifically related to AI-generated patents.

The article "*Artificial Intelligence and Patents in Brazil: Overview on Patentability and Comparative Study on Patent Filings*" states that the field of artificial intelligence (AI) has become increasingly intertwined with human life, permeating various aspects of our daily existence.[27] In line with that, the article named "*Artificial Intelligence and Legal Challenges*"[28] is dedicated to the comprehensive exploration of artificial intelligence (AI)

[25] Grand View Research, "Artificial Intelligence Market Size, Share | AI Industry Report, 2025," <https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market> (accessed 6 June 2023).
[26] Renu Bala Rampal and Swaraj Singh Raghuwanshi, "Demystifying Rights of AI-Generated Inventions," LiveLaw, 15 April 2023, <https://www.livelaw.in/law-firms/law-firm-articles-/ai-generated-inventions-chatgpt-indian-patent-act-dabus-united-states-patent-trademark-office-european-patent-office-226394> (accessed 6 June 2023).
[27] Mariana Machado and Joachim Winter, "Artificial Intelligence and Patents in Brazil," IIC – International Review of Intellectual Property and Competition Law (2023).
[28] Rayhanul Islam, "Artificial Intelligence and Legal Challenges," ELCOP Yearbook of Human Rights 2018 (2018), < https://www.academia.edu/38813888/Artificial_Intelligence_and_Legal_Challenges > (accessed 6 June 2023).

and its multifaceted role and functions. It seeks to illuminate the remarkable innovations that have emerged through the introduction of this transformative technology. Without any doubt, AI is one of the greatest innovations of the modern scientist that has transformed many industries and sectors. As AI evolves quickly with increasing adoption, discussions on how to regulate AI from a legal point of view have become essential. As AI becomes increasingly ubiquitous in all facets of the human society, there is a need for developing a regulatory framework that can effectively cope with the challenges and affordances that AI brings. This study seeks to engage with this debate to open up the regulatory space in which AI operates from a legal perspective. And yet, while the article is about artificial intelligence, it appears the conversation is broader, more general. Moreover, the article discusses the AI itself, not AI-created inventions or patents.

More particularly, the writer in the article in his paper entitled "*A Challenge from Humanoid Bots: An Analysis of the Legal Regime in Sri Lanka on Artificial Intelligence*"[29] discusses the revolutionary nature of AI, looking at related effects of it in the background of Sri Lankan law. The author uses a qualitative approach with special focus on what is at stake with humanoid bots as a vital component of the AI regime. Recognizing the years of advancements that the field is AI is making around the world, the author laments that Sri Lanka is ill-equipped to effectively encounter the legal challenges spawned by the new technology. The author suggests that legal educational institutes could help tackle this problem by heavily focusing on AI subjects in the curriculum to help budding lawyers make sense of this new area. Leaders should also be looking at understanding the legal implications of AI and ensuring suitable regulation of its use.

[29] Ariyadasa, "A Challenge from Humanoid Bots," 263.

It focuses on the challenges faced by intellectual property rights (IPR), particularly within the context of the fourth industrial revolution (4IR), and emphasizes how Sri Lanka continues to fall behind in tackling the IPR revolution contemporarily. Further, the author extensively explores challenges related to patents, copyright, trademarks, trade secrets, and the intricacies of design. The research conducted for this article adopts a qualitative research method, allowing for a comprehensive analysis of the subject matter. The author underscores the inadequate attention given to IPR challenges within Sri Lanka's legal sector, emphasizing the urgent need for amendments to be made in the realm of intellectual property (IP) policies. These amendments should align with the requirements outlined in the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement.

Even though both articles take a different trajectory by centering their research on the intellectual property laws of Sri Lanka, they do not talk about the AI-generated patent in the Sri Lankan IP law. The second article sheds light on the overall landscape of IPR challenges in Sri Lanka, but it fails to address the emerging domain of AI-generated patents or the necessary revisions required in the existing legal framework to accommodate such advancements. Thus, there is a research gap in understanding the implications of AI on patent law and the necessary adaptations that must be made to protect and regulate AI-generated inventions effectively.

To go into further and deeper discussion, the article titled "*Computers as Inventors - Legal and Policy Implications of Artificial Intelligence on Patent Law"*[30] adopts a qualitative doctrinal research approach. The author's primary emphasis revolves around

[30] Erica Fraser, "Computers as Inventors: Legal and Policy Implications of Artificial Intelligence on Patent Law," *SCRIPTed*, vol. 13 (2016): 305.

exploring the concept of joint patent production between computers and humans, particularly concerning the question of whether humans can claim sole patent rights over such collaborative inventions. While the author briefly touches upon aspects related to AI, the main focus remains on the collaborative production of patents involving AI, rather than solely on auto-generated patents by AI systems, such as those seen in cases like DABUS.

However, the article titled "*Artificial intelligence and patents in Brazil: Overview on patentability and comparative study on patent filings*" [31] went into a narrow discussion by conducting a mixed-method study, incorporating both qualitative and quantitative research methodologies. The focus of the study shifts to Brazil, highlighting it as one of the emerging countries in the technology sector. However, despite its technological advancements, Brazil's National Institute of Industrial Property (INPI) lags behind in addressing the issue of AI patents. The author emphasizes the need for amendments to the current patent laws, specifically urging the inclusion of laws pertaining to AI. Additionally, the author calls upon the government to proactively raise awareness among the general population, as many individuals remain unaware that software can be patentable under Brazilian law. However, the author failed to provide any solutions or ideas on how the Brazilian government should take measures to include AI-generated patents and the legal challenges that the government of Brazil might face after the implementation of patent rights. More or less, the article focuses more on the suggestive approach rather than moving towards the solution approach.

[31] Machado, "Artificial Intelligence and Patents in Brazil," 45

In line with the above article, with more clarification, the online article titled "*Demystifying rights of AI-generated invention",*[32] focuses on all aspects of AI and compares it to Indian law. Firstly, the author talks about the AI patent, especially the patent created by DABUS, and discusses the problem in the world, then moves to the discussion about the language learning model AI, such as ChatGPT, and discusses the legal issue arising from it. It also discussed the issues related to AI patents that should be resolved immediately, as it is a threat to human-devised inventions, and suggested an opinion that the inventor of a patent should be a normal human being and that countries such as Australia should clarify more on allowing AI as an inventor in the patent. However, the article primarily concentrates on the viewpoint of Indian law and does not delve deeply into patent law by presenting debates among legal experts in the field. Hence, there is a place for more research in the area with more clarification on the AI-generated patent in Indian law.

Meanwhile, in the article "*Artificial Intelligence is breaking patent law*"[33] The author deals with that well-known problem, who is the owner, and in what ways can the owner be of the patent created by the AI. The heart of the challenge is to understand and describe the term inventor as it relates to a computer-generated invention. The writer draws attention to the challenges AI poses in terms of innovation and advocates the importance of providing clear guidance and regulation in this respect. Regarding AI-generated patents, an international treaty is suggested by the author to resolve this ownership issue. Such a treaty would offer a blueprint to align patent law in various countries, provide guidance on inventorship and ownership rights. Additionally, the author suggests the inclusion of

[32] Rampal, "Demystifying Rights of AI-Generated Inventions."
[33] Alexandra George and Toby Walsh, "Artificial Intelligence Is Breaking Patent Law," *Nature* 605, no. 7911 (2022): 616–618, <https://doi.org/10.1038/d41586-022-01391>.

dispute-resolution mechanisms, overseen by a specialized international court, to handle matters pertaining to AI-generated patents. However, even though the establishment of an international treaty specifically on the AI-generated patent might put a barrier to the argument among the scholars on this matter, there could be questions on to what extent the international treaty could be effective and how long it would take to solve a case and would the establishment of the convention be successful?, as it was discussed above both sides of the scholars have valid arguments. Hence, it could be suggested that there should be more discussions and research on this matter.

Finally, the article titled "*Patentability of AI-generated inventions: Is a reform of the patent system needed"*[34] is recognized as a highly impactful contribution to the discourse on AI-generated patents. This article conducts a comparative case analysis of patent laws in the United States, Europe, and Japan concerning AI-generated inventions. It offers valuable insights and recommendations for addressing the unique challenges posed by these patents. The author's recommendations include the implementation of higher fees for AI-generated patents, acknowledging that this may present challenges in tracing back the origins of such inventions. To ensure accountability and compliance, the article suggests imposing stringent conditions during the patent registration process, aiming to prevent any attempts to evade legal responsibilities. Furthermore, the author highlights the need for improvement in the existing patent laws of the aforementioned countries, emphasizing that they currently lack the necessary provisions to effectively address AI-generated inventions. However, the author failed to discuss the implementation challenges

[34] Ana Ramalho, "Patentability of AI-Generated Inventions: Is a Reform of the Patent System Needed?" SSRN Working Paper No. 3168703 (2018), < https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3168703 >.

of the legal system. For example, how to identify whether the patent is an AI-generated patent or a human invention, or to whom the fees should be charged? Thus, this sector needs a clear and thorough discussion.

In the context of the literature review, based on the above discussion, a significant research gap could be identified related to AI-generated patents and the legal implications within the framework of Sri Lankan law. The articles that were reviewed have touched upon various aspects of AI and intellectual property rights, including international perspectives and broader discussions on inventorship and valuable solutions for this issue, but they have not delved into the specific landscape of AI-generated patents within the Sri Lankan legal system. Hence, the researcher intends to shift the focus to explore the legal landscape within Sri Lanka and propose potential developments to the Intellectual Property Act 2003. While some discussion on AI, in general, may still be included, it will not be the primary focus of the research. By exploring the realm of AI-generated patents and their legal ramifications, the researcher aims to shed light on the evolving landscape of intellectual property rights and the challenges posed by AI-driven innovations. Through the special focus on AI-generated patents and their legal implications, the researcher is hoping to unveil the progress path of intellectual property rights and the minefields in the way of AI innovations. Thus, through an analysis of AI and patent law, the author endeavors to identify any lacunae, inconsistencies, and openings within the legal structure of Sri Lanka, namely the IPA 2003. This analysis will help to gain a better understanding of how AI-generated ideas are protected and regulated, taking into account the particular difficulties provided by this new technological paradigm. Finally, the research intends to provide significant insights and

recommendations for policymakers, legal practitioners, and stakeholders in intellectual property law, allowing them to effectively manage the changing landscape of AI and patents.

# CHAPTER TWO
# THE LEGAL DEVELOPMENT OF AI-GENERATED INVENTIONS

## 2.1 INTRODUCTION

In this chapter, the study shall examine the legal standing of AI-generated innovations within the context of international patent law. Apart from that, this study shall focus on the patent law of the United States of America, the United Kingdom, the European Union, and South Africa. The selection of these jurisdictions is primarily based on two considerations. Sri Lanka, like the US and the UK, follows the common law tradition. Meanwhile, the European Union has one of the most advanced legal systems for dealing with AI-related patent issues. Secondly, South Africa provides a distinctive perspective, as its legal system has recognised AI as an inventor, contrary to the positions adopted by the US, UK, and EU. Hence the researcher chose these countries' legal systems for this study.

Thus, in the present economic environment, intellectual property (IP) has become more important and more valuable as the value of IP has increased. The European Commission recognizes that patents are part of the foundation of today's economy, and as such, represent an intangible asset. Over the last 20 years, investments in intellectual property in the European Union have experienced a remarkable growth of 87%, in sharp contrast with a modest 30% growth in investments in tangible assets.[35]

[35] European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Youth Opportunities Initiative* (Brussels: European Commission, 2011).

Strong IP assets and appropriate protection mechanisms are critical for competitive global trades. This was reported by the European Commission, which highlights the importance of a strong IP framework that can help businesses exploit their IP and protect their investment. This is considered crucial for the good prosperity of an economy.[36]

Furthermore, the study also draws attention to a specific issue: the efficient protection of artificial intelligence (AI)-generated innovations. This demonstrates how IP concerns are changing in the current period, as new technologies like artificial intelligence (AI) create new complications and a need for creative methods of protecting intellectual property.[37] In short, the report emphasizes the importance of recognizing and addressing the evolving landscape of intellectual property to ensure economic growth and competitiveness in today's globalized economy. On the other hand, AI doesn't have a clear-cut definition that everyone agrees on. But for this thesis, the researcher is going to stick with the definition from the European Commission's 2018 Communication on 'Artificial Intelligence for Europe'. According to them, AI is all about systems that can think smartly by looking at what's going on around them and then doing things, kind of on their own, to reach certain goals.[38]

AI can be classified into three categories: software AI, hardware AI, and hybrid AI. AI software is a computer programs that use special engines and algorithms to handle information. They learn from this data and then do things like make predictions, give recommendations, and even interact with people. Apart from that, AI hardware includes

[36] Niloufer Selvadurai, *Inventions Without Inventors: The Need to Recognize AI Systems as Inventors*, 16 Case W. Res. J. L. Tech. & Internet 37 (2025).
[37] Selvadurai, *Inventions Without Inventors*, 37.
[38] Selvadurai, *Inventions Without Inventors*, 38.

regular processors along with a bunch of specialized processors, sensors, and gadgets. These tools help machines understand and work with the real or virtual world. They can do things like think, compute, talk, and cooperate. AI uses a bunch of different technologies, such as predictive analytics, statistical classifiers, machine learning, deep learning, neural networking, and natural language processing[39].

However, to streamline the discussion, the author will emphasize software AI over hardware AI. This focus aligns with the topic of AI-generated patents, which primarily relate to software AI.

## 2.2 AI INVENTION AND PATENTS

The surge in patent applications in the field of artificial intelligence (AI) shows how much people are getting into creating and investing in AI lately. According to an article published by OECD, between 2015 to 2020, AI technology have faced a rapid growth of patent filing by about 30% per year.[40] This big increase tells that more and more folks are working on coming up with new AI ideas, programs, and ways to use them in different industries. What is important is that this increase in patent applications matches up with how fast the AI market is growing. Experts believe the AI market will grow to a massive $191 billion by 2024. That means businesses everywhere are wading into using AI at work.[41]

---

[39] Azmat Abdoullaev, "Is AI Hardware or Software or Data Models or World Models?" *LinkedIn*, (18 November 2023), <https://www.linkedin.com/pulse/ai-hardware-software-data-models-world-azamat-abdoullaev-kj2ze/>.

[40] Hélène Dernis et al., *Identifying Emerging AI Technologies Using Patent Data: A Semi-Automated Approach* (Paris: OECD, September 2025),< https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/09/identifying-emerging-ai-technologies-using-patent-data_5c8da861/d17e9a1a-en.pdf >.

[41] "AI Inventions WIPO Conversation IP and Frontier Technologies," n.d.,< https://www.wipo.int/about-ip/en/frontier_technologies/pdf/wipo-ai-inventions-factsheet.pdf> (accessed 17 April 2024).

Many reasons have led to this achievement. Advances in computer power, algorithms, and more available data have brought AI to the entire range of humans' everyday lives.[42] Moreover, the booming AI patents and market scale are also facilitating the development of AI innovation. Additionally, a great deal of money has been put into AI research and development from academia, particularly in machine learning, deep learning, natural language processing, and computer vision, yielding more potential for AI-driven innovations. In addition, the advent of big data and the development of computing capabilities and cloud computing infrastructure have made it easy to develop and run robust AI tools.[43]

This has created an evolutionary AI that can generate patents on its own, such as DABUS. Hence, it raises a question over whether AI might, for the first time, be capable of generating a patent without some form of human input. This has led to debate as to whether it is appropriate under patent laws for AI-generated inventions to be protected like human-made patents. In addition, the development of AI-created inventions is gradually gaining the attention of policymakers at the global level. And this trend has also sparked a flurry of academic investigations, as scholars try to understand the implications and consequences of these AI-powered advances.[44]

In line with that, the European Patent Office (EPO) made headlines on December 21, 2019, when it declined to review two patent applications. The applications named an

---

[42] "AI Inventions WIPO Conversation IP and Frontier Technologies," n.d., ⟨https://www.wipo.int/about-ip/en/frontier_technologies/pdf/wipo-ai-inventions-factsheet.pdf⟩ (accessed 17 April 2024).
[43] Timothy Maher and Niklas Schaffelke, *Unlocking the AI Advantage: Investigating the Impact of AI Patents on Firm Earnings and Industry Dynamics: A Comprehensive Investigation of the Influence of AI Patent Ownership on Corporate Financial Performance* (2023), <https://www.diva-portal.org/smash/get/diva2:1771192/FULLTEXT01.pdf >.
[44] Robin C. Feldman and Nick Thieme, "Competition at the Dawn of Artificial Intelligence," in *Competition Law for the Digital Economy*, ed. Björn Lundqvist and Michal Gal (Edward Elgar Publishing, 2019), 71–92.

AI system called DABUS as the inventor. The EPO pointed to the formal requirement of the European Patent Convention that an inventor named in the application should be a human, not a machine.

This decision followed a recent invitation from the World Intellectual Property Organization (WIPO) to the public to weigh in, among other things, on how patent law and policy should address inventions made by "autonomously generated by AI." Before WIPO, the U.S. Patent and Trademark Office (USPTO) had sought comments on related issues.[45]

The emergence of AI-invented patents has raised numerous questions among legal experts and legal systems throughout the world. As a result, countries all around the world are searching for an answer to this issue. Certain legal systems are cautious about AI-developed patents, while others are more enthusiastic. The question then becomes whether AI can be credited as an inventor, because standard patent laws promote the rule that inventors have to be human, and not something made up of steel and silicon. In addition, patent rights almost always have significant monetary consequences, as revenues from patents typically flow to the patent holder If an AI comes up with a patent, the issue arises of who should profit from it, given that–as an artificial intelligence–it has no legal status and is incapable of owning property or wealth.

Therefore, the author will delve into the discussion about various types of judgments regarding AI-generated patents across different countries and the social perspectives surrounding them. The exploration will cover the legal stances taken by various jurisdictions, the reasoning behind these decisions, and how they reflect the broader societal views on AI as an inventor. The goal is to assess whether recognizing AI as an

[45] Kim, "'AI-Generated Inventions'," 443.

inventor would positively impact the legal system and society or if it would lead to negative repercussions.

## 2.3 SOCIAL VIEW

Philosophically, various theories support the inclusion of AI innovation in patent law. One prominent theory is John Locke's labor theory, which posits that if an individual creates something through their labor, they should own the resulting product and have the right to claim it.[46] This is because ideas, unlike tangible goods, cannot be plagiarized in the same way. It's important to distinguish between innovation and discovery; innovation involves using one's own ideas to create something new, while discovery involves finding something that already exists but was previously unknown.[47] Thus, innovation is fundamentally about the creation of new things through individual effort and intellectual input, granting the innovator exclusive rights over their creation. Hence, protecting people's ideas is the main role of patent protection theories.

Further, giving attention to protecting AI-generated inventions could lead to a lot of social benefits in society; the incentive and utilitarian theories explain that social welfare should be the main objective in creating something for society.[48] Hence, it is important to understand the social benefits of granting patent protection to AI-generated inventions. Apart from that, academia and society have begun to recognize the harmful effects of a

[46] Adam Mossoff, "Saving Locke from Marx: The Labor Theory of Value in Intellectual Property Theory," *Social Philosophy and Policy* 29, no. 2 (2012): 283–317.
[47] Karel Vandenhende, "The Innovation Paradox: Starting from What Is 'Known' to Facilitate the Discovery of the 'Unknown'," in *Proceedings of E&PDE 2013: 15th International Conference on Engineering and Product Design Education*, Dublin, 5–6 September 2013 (2013), 96–101.
[48] Thomas M. Jones and Will Felps, "Shareholder Wealth Maximization and Social Welfare: A Utilitarian Critique," *Business Ethics Quarterly* 23, no. 2 (2013): 207–238.

technology-centric perspective on AI, including AI-generated patents. Based on that, the social legal scholars suggest that the AI-generated invention also should be based on the human-centered theory which centered the benefit of society at first during the invention. This view will create a huge path to increase the research on Human-Computer interaction (HCI) [49]and critical theory which seeks to expose and alter the systemic forces that limit human freedom and justice, aiming for a more equitable and emancipated society.[50]

The integration of AI into various aspects of society necessitates a sociotechnical approach, ensuring that technology serves and supports societal needs and legal cultures rather than disrupting them. This perspective emphasizes that AI should be developed and implemented with a deep understanding of the social, organizational, and cultural contexts in which it operates. Therefore, every application of AI, including the creation and management of patents, must take account of these factors.

For example, laws and regulations that relate to inventions that are created by an AI system should ensure that the legal and cultural constructs of human society are preserved, as in the case of a patent created by an AI system. This involves making certain that society continues to function efficiently and that advancements made possible by AI do not undermine or disrupt sound legal norms. On the other hand, they ought to improve the social cycle by introducing good values, justice, and fairness. By doing this, the integrity of human legal culture would be maintained through a sociotechnical examination of AI in patent law. Additionally, it would ensure that advancements in AI contribute to rather than

[49] Human-computer interaction (HCI); is a diverse field that explores how to design computer technology, focusing especially on how people interact with computers. Originally cantered on computers, HCI now encompasses the design of almost all types of information technology.
[50] Upol Ehsan et al., "Expanding Explainability: Towards Social Transparency in AI Systems," in *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (2021), 1–19.

diminish social good. With all of this, AI may be in line with human values and legal precedents, so that it may be incorporated into human's everyday life circle.

## 2.4 THE CONFLICT BEHIND THE AI-GENERATED PATENT

Who is the patent owner as an inventor is the primary issue that emerges in AI-generated patents. An "inventor" refers to a natural person who originates the invention as detailed in the claims of the patent. The concept of "conception" has evolved throughout the history of law and has been described in various ways. For instance, conception has been characterized as "the comprehensive execution of the mental aspect of the inventive process in US case law". Additionally, it is defined as "the development in the inventor's mind of an invention" [51],[52],[53],[54]

Meanwhile, the debate over who should be considered the inventor, whether the software developer or the user, has been ongoing for a long time. Patent law and copyright law are both designed to encourage creativity and innovation by giving creators and inventors temporary exclusive rights to their work. This exclusivity provides them with the potential to earn economic benefits, which in turn motivates further creative and inventive efforts in the society. Because of these shared goals, principles from one area of law can often influence and be applied to the other.[55]

---

[51] Peter Cummings, Andrew Balazer, and Christopher Worrel, "Who Is an Inventor?," *Bodman PLC News Center*, 14 June 2023, <https://www.bodmanlaw.com/news/who-is-an-inventor/> (accessed *6 June 2023*)
[52] European Patent Convention, art. 60.
[53] European Patent Convention, art. 62; rule 20(1).
[54] Edward G. Fiorito, "The WIPO Basic Proposal for Harmonization of Patent Laws Viewed from the US Practitioners' Point of View," *AIPLA Quarterly Journal* 19 (1991): 24.
[55] Rita Matulionyte and Jyh–An Lee, "Copyright in AI-Generated Works: Lessons from Recent Developments in Patent Law," *SCRIPTed* 19 (2022): 5.

Software developers play a crucial role in the creation of AI-generated works. Even though these works are not created directly by the developers, they would not exist without the software provided by them. Therefore, it makes sense that software developers could potentially own the AI-generated works produced using their software. The term "software developer" can refer to either an individual programmer or a company that employs programmers to develop software, which the company then owns.[56]

The Nova case from the UK and the Tencent case from China, where the courts ruled in favor of software developers being the rightful owners of computer-generated works. In the Nova case,[57] the Copyright, Designs, and Patents Act (CDPA) 1988 was used to determine copyright ownership, while the Tencent case relied on the originality doctrine. Both courts highlighted that software developers should own the outputs because they played a significant role in shaping how those outputs were generated. However, this determination of originality is not universally applicable to all AI creations due to the inherent complexity and opacity of AI models. AI systems often function as "black boxes," making it challenging for even their developers to fully understand or predict their decision-making processes and outputs.[58]

The Beijing Internet Court (BIC) heard a case regarding an article found through a search in the Wolters Kluwer legal database. The court decided in favor of the plaintiff, who included original content in the search results, making the work copyrightable. The court identified two key players: the programmer who created the database and the user

[56] Robert Yu, "The Machine Author: What Level of Copyright Protection Is Appropriate for Fully Independent Computer Generated Works," *University of Pennsylvania Law Review* 165 (2016): 1245.
[57] Justin Harrington, "The Games People Play: *Nova Productions v Mazooma* [2007] EWCA Civ 219 in the Court of Appeal," *Computer Law & Security Review* 23, no. 5 (2007): 471–475.
[58] Ronald Yu and Gabriele Spina Alì, "What's Inside the Black Box? AI Challenges for Lawyers and Researchers," *Legal Information Management* 19, no. 1 (2019): 2–13.

who prompted the search. Neither was regarded as the author of the search result because the programmer did not conduct the search, and the user's input (keywords) was not considered an original expression.[59]

The recent case revolves around two patent applications that Dr. Thaler filed with the UK Intellectual Property Office (UKIPO) in 2018[60]. He claimed that the inventions were created by an AI machine named DABUS, with no human inventor involved. The application forms explicitly stated that Dr. Thaler was not the inventor. After submitting the applications, Dr. Thaler was notified that he needed to provide a statement of inventorship and an explanation of how he acquired the rights to the patents within 16 months of the filing date, as required by section 13(2) of the UK Patents Act 1977 and rule 10(3) of the Patent Rules 2007. Dr. Thaler responded by declaring that DABUS was the autonomous AI inventor and that he owned DABUS, which granted him the rights to the patents[61].

Initially, the PCT applications were first filed in the US and UK patent offices and ultimately entered the European Patent Office and the German, Japanese, Korean, Australian, and Israeli patent offices. But applications to the patent offices in the US, UK, Europe, and Australia were turned down because the legal systems of those countries state that only humans can be inventors under the patent system.[62]

---

[59] Ju Yoen Lee, "Artificial Intelligence Cases in China: *Feilin v. Baidu* and *Tencent Shenzhen v. Shanghai Yingxin*," *China and WTO Review* 7, no. 1 (2021): 211–222, <https://cwto.net/index.php/CWR/article/view/180>.

[60] Thaler v Hirshfeld 998 F3d 1373 [Fed Cir 2021].

[61] Ryan Abbott, Rita Matulionyte and Paul Nolan, "A Brief Analysis of DABUS, Artificial Intelligence, and the Future of Patent Law," *Intellectual Property Forum*, no. 125 (2021): 10–16.

[62] Rahul Kanna and Pallavi Singh, "*Thaler v Commissioner of Patents* [2021] FCA 879: DABUS—an 'Inventor'?," *Indian Journal of Artificial Intelligence & Law* 2 (2021): 7.

The latest conflict followed Dr. Thaler challenging the rejection of patents derived from his AI inventions in both the US and UK courts. This dispute has generated a great deal of discussion in many articles and books on the extent to which AI can be an inventor. Some academics and commentators have advocated for the recognition of AI as an inventor under patent law because AI is technically capable of inventing. Those scholars think this will encourage innovation and will be a huge pathway to pool investment into the technological field.[63]

However, there are also others who disagree with this perspective, raising various legal and ethical issues. Here is one of the obstacles to granting AI inventorship: AI has no legal standing. AI systems do not have rights or duties, contrary to laws governing humans. This raises a whole set of questions, including who would take ownership of the AI-generated inventions. In case an AI-designed product turns out to be faulty, who is to be blamed if something breaks, or someone gets hurt? And can AI itself face legal challenges, and if not, then who would be legally and financially responsible?[64]

These are some significant questions that highlight the complex and difficult aspects of using AI in the context of patent law. This current dispute highlights the need for extremely cautious consideration and could provide a new legal basis to address these extraordinary issues. Hence, this study will take into account the circumstances in courts across multiple nations and the rulings rendered in the following. This study will also explore the differing legal perspectives and analyze whether there is any potential for AI-generated patents to be protected under future patent laws.

---

[63] Fraser, "Computers as Inventors," 305.

[64] Johanna Gibson, "Artificial Intelligence and Patents: DABUS and Methods for Attracting Enhanced Attention to Inventors," *Queen Mary Journal of Intellectual Property* 11, no. 4 (2021): 401–408.

## 2.5 AI-GENERATED INVENTIONS IN INTERNATIONAL PATENT LAWS

### 2.5.1 The UK Patent Law

Artificial intelligence (AI) is significantly transforming various aspects of people's lives through transformative technology.[65] Similar to the UK Intellectual Property Office (IPO), the UK government is prioritizing AI to promote technological advancement while regulating its capabilities. Consequently, the consultation titled "Artificial Intelligence and Intellectual Property: Copyright and Patents," held between 29 October 2021 and 7 January 2022, addresses these issues. The UK IPO is reviewing three specific areas under "evidence and invention":

a) Copyright protection for computer-generated works without a human author, granting UK protection for 50 years.

b) Licensing for text and data mining (TDM), with specific exceptions to copyright.

c) Patent validation for inventions created by AI systems.[66]

Even though the review is under discussion, the current law is still based on the principle of not providing a patent for inventions created by AI. Under the Patent Act 1977 (UK), the inventor must be a natural person. In the DABUS case, Lord Hodge stated, “Sure!”. Here is a paraphrase of the provided text:

---

[65] Transformative technologies are hardware and software that reliably improve our lives, enhance social connections, and support mental and emotional health. Sangeeta Look Karmokar, “Transformative Technologies and Social Change: An Introduction,” in Transformative Technologies and Social Change (Reading: Academic Conferences International Limited, 2019), <https://openrepository.aut.ac.nz/items/108ec340-e856-4d2e-9c9f-7220493b1b17>.

[66] Zharama Llarena, “Shepard’s Validation of Antitrust Relief Framework on Patent Infringement of Novartis’ Cancer Drug Using Genomic Architectures of Legal Literature Based on UK Intellectual Property Law,” *International Journal of Law and Politics Studies* 5 (2023): 11–17, <https://doi.org/10.32996/ijlps.2023.5.5.3>.

"*Section 130 of the Patents Act 1977 states that the term "inventor" is defined by section 7. According to section 7(3), an "inventor" is the actual creator of the invention. The term "deviser" here is understood in its ordinary sense, meaning a person who creates a new and non-obvious product or process (the invention) that can be applied industrially and protected by a patent. This interpretation aligns with the structure of section 7. Section 7(1) allows any person to apply for a patent, and Section 7(4) establishes a rebuttable presumption that the applicant is entitled to the patent*".[67]

However, a patent can only be granted to individuals falling within one of the three categories specified in section 7(2). Primarily, the patent may be granted to the inventor (section 7(2)(a)). Alternatively, it can be granted to persons mentioned in section 7(2)(b) or to the successors of any person listed in paragraphs (a) or (b) (section 7(2)(c)). These individuals must have legal personality, which may include entities like corporate employers, not just natural persons.[68]

Apart from that, what is particularly relevant for this article is the court's suggestion that in cases involving AI-generated inventions, the owner of the AI should be considered the owner of the invention. According to Justice Smith:

> "[...] there is a general rule that the owner of a thing is the owner of the fruits of that thing. Thus, the owner of a fruit tree will generally own the fruit produced by that tree."[69]

[67] *Thaler v Comptroller-General of Patents, Designs and Trade Marks*, para. 57.
[68] *Thaler v Comptroller-General of Patents, Designs and Trade Marks*, para. 58.
[69] *Thaler v Comptroller-General (UK)* 49(3)(a).

Justice Smith proposed that this analogy should apply to the ownership of AI-generated inventions. Consequently, the court concluded that the owner of the DABUS system should own the outputs produced by the system. This decision may be the first indication that an AI owner should also hold intellectual property rights over AI-generated outputs. This ownership allocation principle is referred to as the AI-owner approach.[70]

So far, the researcher has observed that the UK is very strict about its patent law, as it does not recognize AI as an inventor. Instead, it asserts that the owner of the AI should be the owner of the AI's output because the owner should be a natural human and not a machine. This stance has sparked a significant debate within the legal profession about whether ownership should belong to the software creator or the person who uses the AI (the prompt maker). This question remains debatable in UK patent law, but this research will explore whether there are differing perspectives on AI as an inventor.

### 2.5.2 European Patent Law

The European Patent Convention (EPC) is the main framework that governs the patent laws of the European Union. It is an established international treaty and lays out the procedure for granting European patents. The convention also called as the Munich Convention [71],[72],[73],[74] and according to the convention, the applicants can choose multiple contracting

[70] Matulionyte, Rita, and Jyh-An Lee. "Copyright in AI-generated works: Lessons from recent developments in patent law." Scripted 19 (2022): 5.
[71] Muller, Frithjof E., and Harold C. Wegner. "The 1976 German patent law." J. Pat. Off. Soc'y 59 (1977): 89.
[72] European Patent Convention (EPC), Article 78.
[73] EPC, Article 93.
[74] EPC, Article 90.

states when filing or during the Euro-PCT *(The Patent Cooperation Treaty of 19 June 1970*).[75]

Article 81 of the EPC mandates that a patent application must include the designation of an inventor. The EPC does not explain a clear definition for an inventor, but rather outlines some characteristics, such as that the inventor should be a natural person.[76] The lack of an unambiguous definition leads to the fact that interpretations may differ from one European country to another and can also depend on different situations in each case.

This uncertainty may result in a lack of harmonization in the interpretation of inventorship across the different jurisdictions of Europe. That means, different states may interpret inventorship differently. For example, some may contend that AI could also be an inventor, while others may reject this due to ambiguity in the law. However, in the DABUS case, it was interpreted that the inventor should be a natural person, similar to UK law. In other words, due to legal ambiguity, national patent offices and courts may have some room for interpreting inventorship to mean what fits within its boundaries.[77]

However, as protecting the inventor's rights is the main objective of this condition, the Board of Appeal of the European Patent Office defined the inventor as a natural person with legal capacity. Additionally, this criterion protects the applicant's and the application's

[75] Connor, Marco T., and Lin Yasong. "How to Get Patent Protection in Europe." J. Pat. & Trademark Off. Soc'y 90 (2008): 169.
[76] Fisher, Bernard. "A European View Relating to Interference Issues in a First-to-File World." AIPLA QJ 18 (1990): 52.
[77] Stankova, Eva. "Human Inventorship in European Patent Law." The Cambridge Law Journal 80, no. 2 (2021): 338-365.

rights as well because lacking legal capacity would hinder the fulfillment of these objectives.[78]

So, when Dr. Thaler claimed that the AI was an inventor, the European Patent Office (EPO) dismissed his claim. The reason was that they did not identify any human inventor. This decision confirmed that AI cannot be considered as an inventor in a patent application under the EPO, as the European Patent Convention (EPC) demands that an inventor is a natural person. The decision made it clear that in the absence of a human inventor, the patent application would encounter a formal obstacle that would hinder the EPO's ability to perform a thorough substantive review and, eventually, award a patent without a proper search. This reaffirms that any patent application must be attributed to a human inventor. The problem is that when an invention involves no natural human and is denied to grant inventorship by EPO, then the protection and rights provided by Article 62 of the EPC become meaningless because the EPC emphasizes that the inventor has the right to be mentioned and has complete authority to mention his name as inventor. This would be a questionable argument for the EPO, as they denied the AI the right to be mentioned as an inventor for its product.[79]

In line with this, the EPC's requirement that an inventor should be a person aligns with the current view of the majority of patent systems worldwide that an artificial intelligence (AI) or other non-human entity cannot be an inventor. This has shown how

[78] Emma Johansen, "Inventions Without Inventors" (Bachelor's thesis, Lund University, 2021), <https://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=9104501&fileOId=9107776> (accessed 6 June 2023).
[79] Ibîd.

significant development should be made in the legal sector, especially in the IP law system, because of the technological advancements, and to keep pace with AI evolution.

Furthermore, the legislation has evolved throughout time, which is a historical fact. A judicial decision is not the end of the law[80] but rather one of its chapters in a particular sector. The law has been altered on numerous occasions, and even old laws have been updated to new forms of legislation in response to technological advancements to adapt to society. Today, the EPC does not recognize AI as an inventor, but it may in the future and accept global developments in the AI sector. Therefore, the possibility of granting inventorship to AI remains a subject of discussion within the fields of patent law and artificial intelligence, and whether this shift will occur depends on how these debates progress.

### 2.5.3 The US Patent Law

Similar to other patent systems, U.S. patent law grants inventors' exclusive rights to their inventions for a limited period. Title 35 of the United States Code (U.S.C.) serves as the foundational legislation governing patents in the U.S., detailing the criteria for patent eligibility and the procedures for obtaining a patent while also defining the rights and responsibilities of patent holders. Under the U.S. patent law, there are three types of patents that will be granted: utility patents[81], design patent[82] and plant patent.[83] To qualify for these

[80] Nyoli Valentine, Steven Durning, Ernst Michael Shanahan and Lambert Schuwirth, "Fairness in Human Judgement in Assessment: A Hermeneutic Literature Review and Conceptual Framework," *Advances in Health Sciences Education* 26 (2021): 713–738.
[81] Granted for new and useful processes, machines, articles of manufacture, or compositions of matter, or improvements of existing ones. These are the most common patents.
[82] Protect new, original, and ornamental designs for articles of manufacture.
[83] Issued for the invention or discovery of a distinct and new variety of plant that can be asexually reproduced.

patents, the inventions must meet specific requirements of novelty,[84] non-obviousness,[85] utility,[86] and disclosure.[87],[88]

The main section that addresses the types of inventions eligible for patents in the U.S. is Section 101. It establishes the standards for what can be patented under U.S. patent law. This part is essential for figuring out patent eligibility, particularly for innovations in industries like software, business processes, and medical diagnostics. However, the challenge lies in the statutory wording, which provides very little guidance or clear rules for interpretation.[89]

> *"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."*[90]

Since the language of Section 101 is broad and general, the U.S. Supreme Court has imposed certain exceptions to clarify what qualifies as patentable subject matter. The exceptions include natural laws, natural facts, and abstract notions. Although not explicitly stated in the Act, these limitations have resulted from judicial decisions to ensure that fundamental scientific principles are accessible to everybody. The U.S. Supreme Court has

[84] The invention should be new and disclosed to the public
[85] The invention should not be an obvious enhancement or combination of current technologies.
[86] The invention must have a practical, particular application. This primarily refers to utility patents.
[87] The inventor must disclose every detail of the invention in a patent application, including how it works and how to create or use it, to guarantee that the public benefits from the information after the patent expires.
[88] Martin J. Adelman, Randall R. Rader and John R. Thomas, *Cases and Materials on Patent Law* (2009).
[89] Deborah E. Bouchoux, *Intellectual Property: The Law of Trademarks, Copyrights, Patents, and Trade Secrets* (Boston: Delmar Cengage Learning, 2018).
[90] 35 U.S. Code § 101.

established exemptions to Section 101[91] for natural laws, natural events, and abstract notions. The Court has emphasized the importance of making exclusions for patenting abstract ideas like natural laws, as they can discourage the discovery of new knowledge rather than encourage it. An innovative and useful use of these principles may be patentable.[92]

In line with that, the U.S. legal system appears to have opened the door to AI's innovative role, but the extent of this accessibility is still being debated. AI-developed innovations can currently be patented in the US, but the inventor must be human, which means AI-assisted innovations are acceptable. Hence, DABUS, an AI entity, had applied for the inventorship of a patent, relying on the principle which accept the patent assisted by AI, but the court denied the application, citing that AI cannot be regarded as an inventor under present legislation. However, the court did concede to the possibility that this interpretation could change if AI were to start showing human characteristics like understanding, reasoning, and the capacity for taking responsibility for its actions.[939495]

This could create opportunities for change in patent law as AI technology evolves. Further, there is a great deal of effort being put into creating emotionally intelligent AI

[91] Päivi Hutukka, "Patent Law in Comparative Context: Differences and Similarities of Patent Law in the European Union, the United States and China," *Maastricht Journal of European and Comparative Law* 30, no. 3 (2023): 273–311.
[92] "Section 101 and Artificial Intelligence (AI) Patents," *BitLaw* (2014), <https://www.bitlaw.com/ai/section-101-eligibility-for-AI-inventions.html> (accessed 4 August 2025).
[93] *Thaler v. Hirshfeld*, 998 F.3d 1373 (Fed. Cir. 2021)
[94] *Thaler v Vidal* 2022 WL 1659111 (D.D.C. May 25, 2022).
[95] U.S. Patent and Trademark Office, "Request for Comments on Intellectual Property Protection for Artificial Intelligence Innovation," 87 Fed. Reg. 21352 (11 April 2022), <https://www.federalregister.gov/documents/2019/10/30/2019-23638/request-for-comments-on-intellectual-property-protection-for-artificial-intelligence-innovation>.

(EMO AI), the type of AI that can understand and react to human emotions. This suggests that the legal sectors are a step closer to developing AIs that have human-like qualities such as cognition, emotion, and decision-making.[969798]

Therefore, if AI becomes sufficiently responsible and self-functioning like homo sapience, the question of who an inventor is up for reconsideration. It would raise serious questions of legitimate rights and obligations of AI, including whether AI should count as a legal person capable of holding intellectual property rights.[99] This redefinition of the role of AI could revolutionize what the world thinks of as innovation and creativity in the future, increasingly mixing human and machine work.

### 2.5.4 South African Patent Law

South Africa's intellectual property laws, which also cover copyright laws, are the same as its patent laws. The definition of an inventor according to patent law, universally, an inventor is typically someone who helps come up with an idea for an invention. However, with the emergence of AI-generated creations, this notion is being called into question.

The IP rules of South Africa, like those of many other jurisdictions, require that an inventor be a "person". However, the law does not explicitly define what qualifies as a "person."[100] This lack of clarity has sparked debates. Some argue that the term applies

[96] Rosalind Picard, *Affective Computing* (Cambridge, MA: MIT Press, 1997).
[97] Rana el Kaliouby and Rosalind Picard, *Girl Decoded* (New York: St. Martin's Press, 2017).
[98] Fei-Fei Li and John Etchemendy, "The Rise of the Machines: John Etchemendy and Fei-Fei Li on Our AI Future," *Hoover Institution*, <https://www.hoover.org/research/rise-machines-john-etchemendy-and-fei-fei-li-our-ai-future> (accessed 6 June 2023).
[99] Simon Chesterman, "Artificial Intelligence and the Limits of Legal Personality," *International and Comparative Law Quarterly* 69, no. 4 (2020): 819–844.
[100] Inventa, "Artificial Intelligence as an Inventor: A Brief Exploration of South African Intellectual Property Law," n.d., <https://inventa.com/ip-news-insights/opinion/artificial-intelligence-inventor-brief-exploration-south-african> (accessed 6 June 2023).

strictly to natural humans, while others believe it could extend to non-human entities like AI.[101] Interestingly, the law uses the pronoun "him" when referring to an inventor, a term historically used to represent humans, both male and female. This has added another layer of complexity to the interpretation of whether it can be used for non-humans, such as AI.

Section 27 of the Patent Act[102]

"*(1) An application for a patent in respect of an invention may be made by the inventor or by any other person acquiring from him the right to apply or by both such inventor and such other person."*

In line with this, South Africa gained international attention in the field of intellectual property for granting a patent to an AI-generated invention under particular conditions. This landmark decision was made in the case of DABUS, that is because, unlike many other countries, South Africa's patent office does not thoroughly examine the content or validity of patent applications. Instead, its major goal is to ensure that the applications meet the necessary procedural and formal criteria. That means if all the documents are clear, then it can proceed to the patent registration, rather than whether the person has the ability or not.

This issue has sparked significant debate among legal scholars. The Australian Deputy Commissioner pointed out that the South African Patents Act refers to an inventor as "him," a pronoun traditionally associated with human individuals. This phrasing has led to questions about whether the law strictly limits inventors to natural persons or if it could extend to non-human entities like AI. However, the decision on this matter should follow

[101] Alisa Khachatryan, "The Legal Challenges of AI-Created Inventions: Inventorship and Ownership Issues in Intellectual Property Law" (Bachelor's thesis, Tallinn University of Technology, 2024).
[102] Patents Act 1978 (Act No. 57 of 1978, as amended by Patents Amendment Act 2002).

a purposive approach to statutory interpretation. Instead of rigidly adhering to the literal wording of the law, courts and legal authorities should focus on its broader intent. The goal is to interpret and apply the law in a way that aligns with its underlying purpose, which, in the case of the Patents Act, is to encourage and protect innovation.[103]

Some argue that the policies governing patents in intellectual property (IP) are clear and comprehensive enough to remain relevant both today and in the future. These policies are designed to serve not only the present but also to adapt to the evolving landscape of innovation. However, since the IP Act predates current advancements in technology, it should be updated to reflect modern realities. With rapid advancements in AI technology, laws need to evolve to address the legal questions surrounding AI-generated inventions. Supporters of this perspective believe that allowing AI to be recognized as an inventor is the right decision. It not only aligns with the purpose of IP laws but also encourages other jurisdictions to consider the implications for the future.

Additionally, the South African Patents Act requires proof of ownership or authority over an invention, but does not explicitly restrict this to human inventors. This openness suggests that an AI system can be recognized as an inventor, reinforcing the validity of the decision to grant AI inventorship.[104]

In the discussion above, the researcher explored the ownership of inventions created by AI, using examples from the DABUS case across various jurisdictions, including the

[103] *Bato Star Fishing (Pty) Ltd v Minister of Environmental Affairs and Tourism & Others [2004] 4 SA 490 [CC].*

[104] Donrich Thaldar and Meshandren Naidoo, "AI Inventorship: The Right Decision?," *South African Journal of Science* 117, no. 11–12 (2021): 1–3.

USA, UK, Europe, and South Africa. Based on these examples, three distinct viewpoints emerge:

1. AI Cannot Be an Inventor: Some argue that AI cannot qualify as an inventor under current laws, as these explicitly require a human inventor.

2. AI as a Future Inventor: While current legal frameworks may not recognize AI as an inventor, some believe that future amendments could make this possible.

3. AI Should Be Recognized as an Inventor. Advocates of this view argue that, as demonstrated by South Africa, AI should already be considered an inventor. This stance is based on the clear and forward-looking purpose of IP policies, which are designed to adapt to innovation and serve both present and future needs.

Given these perspectives, the next chapter will focus on Sri Lankan IP law. The researcher will examine whether Sri Lanka's legal framework aligns with these viewpoints—whether it currently denies AI inventorship, could potentially allow it in the future, or requires amendments to support AI as an inventor. The following chapter will analyze Sri Lanka's IP laws in detail, evaluate their stance on AI-generated inventions, and determine whether AI can or should be recognized as an inventor under Sri Lankan law.

# CHAPTER THREE
# INTELLECTUAL PROPERTY LAW AND SRI LANKAN IP LAW

## 3.1 INTELLECTUAL PROPERTY (IP)

This chapter will examine the whole IP law in Sri Lanka from the beginning. In line with that, the discussion will trace the historical evolution of Sri Lanka's intellectual property (IP) law, beginning from its colonial foundations and subsequent adoption of the modern patent system, leading to the current legislative framework under the Intellectual Property Act No. 36 of 2003. In the continuation, the study will drag the discussion to the patent law of Sri Lanka to determine whether there is any existing legal framework or policy that specifically addresses AI and AI-generated inventions.

Intellectual property (IP) is not a novel concept of the modern era but has its roots in the Old English period. However, the term "intellectual property" began to emerge in the 19th century and more commonly entered different legal systems in the 20th century. People had different ideas about just what it meant over time.[105] Many people take it upon themselves to muddle through the many definitions of IP. The World Intellectual Property Organization (WIPO) provides a broad definition of IP as "creations from the mind" that comprises innovations, authorship and art, designs and symbols used in trade, distinctive

[105] Pamela O. Long, "Invention, Authorship, Intellectual Property, and the Origin of Patents: Notes Toward a Conceptual History," *Technology and Culture* 32, no. 4 (1991): 846–884.

symbols for words, and words themselves mixed in unique enough items to make an impact or otherwise appear startlingly similar.[106]

Similarly, as the United States Patent and Trademark Office (USPTO) explains it, IP is "intangible creations of the human mind.[107] There are differences between the two definitions, but they overlap in many ways. There is a subtle contrast between "intellect" and "mind Intellect is associated with decisions and choosing the most reasonable insight from among those thoughts that are evaluated by thought, feeling heart, while mind is linked to the web of ideas, flows of concepts, and emotive experiences of being alive.[108] Such divergent interpretation led to a different view among the legal sectors as the WIPO situates the source of creativity and emotional origins in the mind, but the USPTO considers it as an innovation, something rational output.

On the other hand, the European Union Intellectual Property Office (EUIPO) defines Intellectual Property (IP) as a legal right protected by law, and focuses on its role as an instrument to secure rights rather than an issue of simple innovation. This point of view is consistent with the European Union's goal of promoting a competitive economy and offering employment opportunities within its territory.[109] By ensuring that intellectual property rights are protected, EUIPO encourages investors to take an active part in the

---

[106] World Intellectual Property Organization, *What Is Intellectual Property?* <https://www.wipo.int/> (accessed 31 December 2024).
[107] United States Patent and Trademark Office, *Intellectual Property Basics*, <https://www.uspto.gov/> (accessed 31 December 2024).
[108] Gary Hatfield, *The Workings of the Intellect: Mind and Psychology*, IRCS Technical Report No. IRCS-96-05 (University of Pennsylvania, 1 April 1996).
[109] Stefano Comino, Fabio Maria Manenti and Nikolaus Thumm, *Intellectual Property and Innovation in Information and Communication Technology (ICT)*, JRC Science for Policy Report no. JRC97541 (European Commission, 2015).

European economy with confidence. Without a proper IP protection regime, it would be harder to gain investors' trust. Likewise, the TRIPS Agreement focuses on all forms of intellectual property that are regulated by laws. It demonstrates that TRIPS provides broad IP protection that is highly significant to the world economy.

Examining all these definitions, it can be seen that emphases in areas of Intellectual Property can differ quite substantially. WIPO emphasizes the intellectual and creative bases for intellectual property, bringing forth the delicate contrast between "mind" and "intellect." WIPO stresses how the mind is the source of ideas and creation, and USPTO underlines that intellectual property follows the course of intellect to develop innovation. And EUIPO adds still another dimension to this perspective by emphasizing the legal and economic aspects of intellectual property, viewing it as an instrument that mints money for investment, boosts competitiveness, and also promotes economic growth. TRIPS, by contrast, seeks a broader, all-embracing approach to combining rights on all forms of property worldwide under a single regime. This variety of perspectives highlights the diverse nature of intellectual property and emphasizes its role in stimulating creativity, protecting legal rights, and propelling economic development.

### 3.2 COMPONENTS OF INTELLECTUAL PROPERTY

Each part of intellectual property safeguards a different type of human creative and inventive work. Using copyright, creators can stop others from using their unique books, music, films, software, and artworks without permission. On the other hand, patents provide an inventor protection for new inventions or discoveries, granting inventors the right to use,

produce, or sell their innovations for a set period, usually 20 years.[110] These include a utility patent for a useful invention, a design patent for a nice design, or a plant patent for brand-new plants.[111] Trademarks validate brand name signs or logos that differ from others in order to represent a definite brand, helping sellers establish their own identity and prevent confusion for their customers. Under the law, trademarks can last forever as long as they are renewed and actively used.[112]

Together, these factors protect art and innovation and reinforce their value. Trade secrets protect confidential business information such as a recipe, a manufacturing technique, or a business strategy or process that gives the company an edge over competitors. For so long as the information is kept secret and reasonable measures are taken to keep it confidential, these remain inviolable.[113] Industrial designs protect the visual or ornamental characteristics of goods, including shape, pattern, or color variations, enabling them to be distinguished in multiples of one product distributed across a market. Likewise, geographical indications (GIs) are tags that show this or that particular characteristic of a product, derived from its origin as noted on the tag. A famous example can be seen in Champagne. Champagne is a region in France, and the champagne that people drink comes

[110] Rebecca S. Eisenberg, "Patents and the Progress of Science: Exclusive Rights and Experimental Use," *University of Chicago Law Review* 56, no. 3 (1989): 1017–1086.
[111] Andrew Beckerman-Rodau, "Design Patent Evolution: From Obscurity to Center Stage," *Santa Clara High Technology Law Journal* 32 (2015): 53.
[112] Gaurav Sharma, "Trademarks and Branding in the Tech Industry," <https://iajesm.in/admin/conference/65a3c764d69c5.pdf> (accessed 4 March 2025).
[113] Michael A. Epstein and Stuart D. Levi, "Protecting Trade Secret Information: A Plan for Proactive Strategy," *Business Lawyer* 43 (1987): 887.

from there, so it's called "Champagne," and as well as Parmesan cheese made in Italy is Parmigiano Reggiano.[114]

Also, the integrated circuits and layout designs focus on protecting the three-dimensional configurations of electronic circuits, encouraging innovation in electronics and technology. Apart from that, the new plant varieties protect agricultural advancements, including genetically engineered crops or drought-resistant plants, contributing to food security and sustainable agriculture.[115] Together, these components of intellectual property create a comprehensive system that supports creativity, fuels economic growth, and rewards innovation.

### 3.3 IP ORGANIZATIONS

The World Intellectual Property Organization (WIPO) is a special agency of the United Nations (UN) whose purpose is to protect and promote IP rights for its member countries.[116] Like the researcher describes above, intellectual property stands for many kinds of creativity, including inventions, literature, art, trademarks, designs, and symbols. Through its firm IP rules, WIPO is very important for developing creativity, supporting innovation, and promoting the world's economy. At present, WIPO looks after 27 agreements related to intellectual property, which create a legal basis for countries to cooperate in managing

[114] Renée Johnson, "Geographical Indications (GIs) in US Food and Agricultural Trade," *Congressional Research Service Report* No. 21 (2017).
[115] Elizabeth A. Rowe, "Patents, Genetically Modified Foods, and IP Overreaching," *SMU Law Review* 64 (2011): 859.
[116] Janice T. Pilch, "World Intellectual Property Organization (WIPO)," in *Encyclopedia of Library and Information Science*, 4th ed. (CRC Press, 2017), 5000–5011.

IP rights.[117] It helps to define the rules for protecting inventors, businesses, and creators who make intellectual contributions.

Besides WIPO, other organizations on a worldwide scale supervise some parts of IP protection as well. UNESCO is involved in managing the Universal Copyright Convention (UCC). This convention sets out global rules for the protection of copyright and ensures that the fruits of human labor—books, music, films, and software—are legally protected.[118] Copyright laws grant creators exclusive rights over their intellectual creations so they can glean financial rewards from those who use them without permission, reproduce them, or distribute copies of their work in whole or in part.

On the other hand, the copyright owners obtain royalties and exclusive rights over their intellectual product through copyright law. This law prevents others from reproducing them or distributing copies of their work in whole or in part. The World Trade Organization (WTO) is one of the main organizations that deals with intellectual property law within its member countries, and its main job is to ensure that the contract on Trade-Related Aspects of Intellectual Property Rights (TRIPS Treaty) is effectively executed.[119] The main vision of this agreement is to safeguard and impose basic rules to protect and enforce intellectual property rights, which all member nations of the WTO are obliged to observe. TRIPS, therefore, melds the rules of intellectual property protection with those of international trade agreements. TRIPS helps to regulate international trade by managing the problems of

[117]World Intellectual Property Organization, "*WIPO-Administered Treaties*," <https://www.wipo.int/treaties/en/> (accessed 5 February 2025).
[118] Klaus Hüfner, "UNESCO – United Nations Educational, Scientific and Cultural Organization," in *A Concise Encyclopedia of the United Nations* (Brill Nijhoff, 2010), 715–718.
[119] Carlos María Correa, *Trade Related Aspects of Intellectual Property Rights: A Commentary on the TRIPS Agreement* (Oxford University Press, 2020).

counterfeiting, misuse of patents, and unfair trading. Because of this, the interests of both businesses and consumers are protected, and there is an equitable level of competition globally.[120]

The International Union for the Protection of New Varieties of Plants (UPOV) is also in charge of managing the International Convention for the Protection of New Varieties of Plants. With this agreement, plant breeders are recognized by law for inventing new varieties of plants.[121] Their measures for supporting new plant species help UPOV achieve progress in agriculture, ensure food sufficiency, and aid in protecting the environment. Because of this protection, plant breeders are motivated to find new crop varieties that help most people affected by farming problems.[122]

### 3.4 SRI LANKA IP LAW

Sri Lanka's IP laws come from local legislation such as the Intellectual Property Act No. 36, as well as from international treaties. The study will discuss international treaties initially and later move on to explaining the local IP Act. The key multilateral treaties Sri Lanka has ratified which will be deliberated below, regulate the protection of intellectual property rights in Sri Lankan IP law. Thus, it has been considered an active participant in the global intellectual property (IP) system. Sri Lanka is frequently at the heart of initiatives

[120] I. Imasuen, "The World Trade Organisation (WTO)–Trade Related Aspect of Intellectual Property Rights (TRIPS) and the Regulation of Counterfeit Pharmaceutical Product in Nigeria" (PhD diss., University of East London, 2021).
[121]Graham Dutfield, "The Role of the International Union for the Protection of New Varieties of Plants (UPOV)," *Intellectual Property Issue Paper* 9 (2011): 24.
[122]V. Ishola, "Leveraging Robotics for Sustainable Agriculture: A Comparative Analysis of Africa and the EU's Food Security Strategies," *African Journal of Agriculture and Food Science* 7, no. 4 (2024): 317–329, <https://doi.org/10.52589/ajafs-3mcayt0d>.

to standardize and coordinate this regulatory regime. As one of the members of these treaties, Sri Lanka's IP laws should be aligned with international standards; only then may the country be able to ensure legal protection for creators, businesses, and innovators and promote foreign investment and economic growth. By adhering to these international agreements, Sri Lanka can strengthen its IP framework and promote innovation; likewise, it will hold a stronger position in the international market.

The **Paris Convention,**[123] established in 1883, is a significant international treaty that sets standards for protecting industrial property, including patents, trademarks, industrial designs, utility models, service marks, and trade names across its member countries.[124] One of its most important features is the right of priority, which allows individuals or businesses to apply for intellectual property protection in multiple countries while maintaining the original filing date. This principle helps inventors and companies secure their rights internationally without the risk of losing priority to competitors.

Sri Lanka was among the 195 countries that adopted the Paris Agreement during the 21st Conference of the Parties (COP21) to the UN Framework Convention on Climate Change (UNFCCC) in Paris. On September 21, 2016, President Maithripala Sirisena formally submitted Sri Lanka's instrument of ratification at the UN General Assembly in New

[123] Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016). The agreement officially came into effect on November 4, 2016, after meeting two key requirements: ratification by at least 55 countries and collective responsibility for 55% of global greenhouse gas (GHG) emissions. By August 25, 2017, a total of 160 countries had ratified the agreement, further strengthening global efforts to combat climate change.

[124] Almusawir, "Legal Protection of the Communal Rights to Geographical Indications in the Perspectives of Human Rights in Indonesia," *EAI Endorsed Transactions on Human Rights* (2021), <https://doi.org/10.4108/eai.17-7-2019.2303497>.

York.[125] This convention now enables local investors, entrepreneurs, and businesses to expand their IP beyond national borders, so that they get much more easily into global markets but still feel assured that they would not lose control when things go wrong abroad. At the same time, the legal protection granted in Sri Lanka to applicants from countries which it has reciprocal agreements with Sri Lanka, can promote the expansion of international trade and industry. It is anticipated that this will contribute to the growth of Sri Lanka's export zones and encourage greater foreign investment within the country. For example, Sri Lanka signed a reciprocal agreement with France under the title named "*Agreement on the reciprocal promotion and protection of investments (with exchange of letters). Signed at Colombo on 10 April 1980"*[126] to promote investment between both countries.

Sri Lanka has also signed the **Berne Convention** for the Protection of Literary and Artistic Works (1886),[127] which emphasizes three fundamental principles while setting minimum protection standards for creative works. This convention ensures that copyright protection is granted equally across all member countries, just as it would be in the country of origin. Additionally, it states that no formal requirements should be imposed for a work

[125] Lakshman Kadirgamar Institute, *The Paris Agreement on Climate Change and Sri Lanka*, <https://lki.lk/publication/the-paris-agreement-on-climate-change-and-sri-lanka/> (accessed 5 February 2025).
[126] "Agreement on the Reciprocal Promotion and Protection of Investments between the Government of the French Republic and the Government of the Democratic Socialist Republic of Sri Lanka," signed April 10, 1980, UNTS vol. 1309, no. I-21844, 131–145.
[127] National Intellectual Property Office of Sri Lanka, "Protection Abroad," <https://www.nipo.gov.lk/> (accessed 13 February 2025).

to receive protection and that copyright protection should be independent, meaning it does not rely on whether the work is protected in another country.[128]

One of the most significant aspects of this convention is the provision of moral rights to authors. These rights include the ability to claim authorship, object to modifications, and protect the integrity of their work. While the Berne Convention primarily focuses on copyright, and this discussion is centered on patents, the author of this research aims to first outline all intellectual property (IP) treaties Sri Lanka has signed or ratified. After this overview, the research will shift focus specifically on patents.

Moreover, Sri Lanka has been a member of the **Patent Cooperation Treaty (PCT)** since 1982, which is open to any country that is part of the Paris Convention. While PCT is an international treaty, it does not grant patents directly - there is no such thing as a global or international patent. Instead, it provides a structured process that helps inventors seek patent protection in multiple countries, with each country following its own legal system and regulations.[129]

Sri Lanka has been part of the PCT for decades; nevertheless, it currently does not have any offices that can accept the applications. The main reason is the limited number of applications filed and processed in the country. From 2006 to 2011, a very small amount

[128] World Intellectual Property Organization, "*Summary of the Berne Convention for the Protection of Literary and Artistic Works (1886)*," <https://www.wipo.int/treaties/en/ip/berne/summary_berne.html> (accessed 13 February 2025).
[129] Asanka Perera, "Discourses on Patent Law Reforms in Sri Lanka," in *Dilemmas of Intellectual Property Discourse in Sri Lanka* (Springer Nature Singapore, 2024), 47–111.

of activity was reported with PCT applications from Sri Lanka. In 2006, only one such application was filed, while 2011 witnessed a measly six applications.[130]

One important explanation for this inadequate level of participation is the difficulty of entering the national stage of the PCT in Sri Lanka. The people requesting protection for their patents must pay national fees and choose a local agent. Furthermore, they are expected to give an English translation of all their documents, since neither Sinhala nor Tamil (the country's two official languages) is spoken on an international stage, and these are not always easy to obtain everywhere. These are conditions that make it difficult for many inventors and firms in Sri Lanka to get the most out of the PCT system; limitations like these have a negative impact on Sri Lanka's overall engagement in international patent applications.[131]

Sri Lanka is a signatory to the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPS), a comprehensive international treaty administered by the World Trade Organization (WTO). TRIPS. According to this agreement, member states must adhere to IP laws and regulations set by TRIPS. It was established in 1994, as countries like Sri Lanka were seeking to be more competitive in the world market with increasingly high-tech goods production. It made compulsory for signatory nations to give legal protection and enforcement measures to intellectual property.[132]

[130] National Intellectual Property Office of Sri Lanka, "The National Experience and Future Plans for the Use of the PCT System in Sri Lanka," accessed February 16, 2025.
[131] NIPO Sri Lanka, "PCT System in Sri Lanka."
[132] World Trade Organization, "Overview: The TRIPS Agreement," <https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm> (accessed 13 February 2025).

Moreover, this agreement covers seven areas of intellectual property rights globally: copyrights, trademarks, geographical indications, industrial designs, patents, layout designs of integrated circuits, and undisclosed information. Therefore, Sri Lanka introduced the Intellectual Property Act in 2003 to coincide with TRIPS and other international agreements.[133]

### 3.4.1 Intellectual Property Act No. 36 Of 2003

Sri Lanka's intellectual property (IP) rights are generally governed by the Intellectual Property Act No. 36 of 2003. It was introduced firstly on November 12, 2003, with 27 articles to ensure protection of copyrights and related rights, trademarks and service marks, patents, industrial designs, geographical indications, layout designs of integrated circuits, and undisclosed information (trade secrets). It also describes how to register, manage, and govern IP rights. Moreover, it amends the Customs Ordinance (Chapter 235) and the High Court of the Provinces (Special Provisions) Act No. 10 of 1996 to improve the enforcement of IP rights in Sri Lanka.[134]

### 3.4.2 National Intellectual Property Office of Sri Lanka (NIPO)

According to the Intellectual Property Act No. 36, the National Intellectual Property Office of Sri Lanka (NIPO) is the only authority that manages the nation's intellectual property system. The institute is responsible for overseeing national intellectual property rights and ensuring Sri Lanka follows international rules on IP. On January 1, 1982, NIPO

[133] Dilani Hirimuthugodage, *Trade Related Intellectual Property Rights (TRIPS) Agreement and the Agriculture Sector in Sri Lanka*, ARTNeT Working Paper Series No. 92 (2011).
[134] Parliament of the Democratic Socialist Republic of Sri Lanka, *Intellectual Property Act, No. 36 of 2003*, enacted November 12, 2003.

was officially recognized as an independent unit within the Ministry of Trade. Even though the NIPO officially started functioning as an independent government entity under the Ministry of Trade, its origins trace back to the Code of Intellectual Property Act No. 52 of 1979, which laid the groundwork for its establishment in 1980. Its primary aims are to safeguard the moral and economic rights of creators, encourage innovation and technological advancement, and maintain a fair balance between the rights of inventors and the interests of the public.

The NIPO informed that the IP law of Sri Lanka is classified into two parts. The first one is industrial property, which encompasses patents, trademarks, industrial designs, trade secrets, and geographical indications, as well as legal protection against unfair competition. The second category is copyright, which covers original literary, artistic, and scientific works.

According to the National Intellectual Property Office (NIPO), 2018 began a new era for Sri Lanka's intellectual property (IP), as the country became digital and followed international trends. In that year, NIPO adopted a policy driven by IT, focusing on customers, to update its services. With WIPO's help, NIPO improved its services by automating them, overcoming initial obstacles in using new computer systems. This created a rapid increase in the IP activities. In the year 2018, NIPO received 11,488 trademark applications, and out of all these, around 5,207 of them were successfully registered. Additionally, around 603 patent applications were received by the NIPO, and 213 of them successfully passed the examination, and patents were awarded. And not only that, but out of 288 industrial design applications, 124 were approved successfully. These results explain

how improvement has happened in the NIPO and Sri Lankan IP management, and this is definitely indicating a milestone in the country's intellectual property history.

Furthermore, the Sri Lankan government ratified the World Trade Organization's (WTO) Trade Facilitation Agreement on 31st May 2016. The reason behind this treaty is to simplify global trade and establish a business-friendly environment among its member countries. As a member of this treaty, Sri Lanka established the National Trade Facilitation Committee under the governance of the National Intellectual Property Office (NIPO). To assist this project, the NIPO created a partnership with the Department of Commerce to offer intellectual property information and helped to build the Sri Lanka Trade Information Portal as a web-based platform that consolidates all trade-related data in one area. Further, NIPO modernized its legal sector and digital infrastructure to comply with TFA.

Beyond this, NIPO has also focused on making people aware of the significance of intellectual property (IP). The office offers several programs to inform and educate professionals, businesses, and the public regarding innovations and IP rights. In the last year, several such programs were arranged, and some included leading IP experts from other countries. In a short span of two months, over 150 people joined the sessions.

There are several divisions inside the National Intellectual Property Office (NIPO), and each of them is focusing on a different issue, such as copyright, patents, and industrial design. There are approximately 15 people at the patent division, with each staff member taking on different jobs, like some of them reviewing paperwork, another division examining coding and technology, and a few taking care of data entry and checking.

The patent applicants should use the Form P1 provided by the regulations when applying. When submitting the application, the applicant should include all the details and explanations related to the invention, along with the proper fee. Every interested individual may file a search report prepared by an International Searching Authority (ISA). Alternatively, they might request that the NIPO forward the application to a local patent examiner for a search.

Once the application is received, it is entered into the system, and the contents are reviewed for errors or misleading information. If the paperwork is in order, the next step is to determine if the invention is novel by doing a prior art search both locally and worldwide. If prior art is identified, the application may be rejected. However, if no such prior art exists or if the invention is sufficiently distinct from similar inventions, the examination proceeds.

A further step involves evaluating whether a person skilled in the relevant field could independently create the invention based on the description. If the skilled person confirms they could replicate the invention with ease, the application may be rejected on the basis that the invention lacks inventive step or novelty. If replication is not feasible, the process continues.

Later, the government of Sri Lanka will publish the application in the Government Gazette and provide a three-month period for the public to object. If no objections are received within this period, then the file will move to the next step, but if any objection is received, then the office will look into them carefully. So, if there is no objection or complaint, then the NIPO will issue the patent for 20 years of protection. This demonstrates

how NIPO is committed to building up Sri Lanka's intellectual property system and inspiring more innovation among its businesses. Furthermore, Sri Lanka's effort to keep up with modern trends is helping it compete globally in the intellectual property sector.

## 3.5 EVOLUTION OF PATENT LAW OF SRI LANKA

### 3.5.1 British Inventor's Ordinance (1859)

The British Inventor's Ordinance (1859) was the first Sri Lankan patent legislation, which was passed by the British during the British colonial period. Most of its laws follow the British patent law structure at the time, namely the *Statute of Monopolies (1623) and the Patent Law Amendment Act of 1852.*[135] The Crown's authority was mostly limited by the Statute of Monopolies, and it provided room for developing a systematic framework for protecting new technologies.[136] Meanwhile, the Patent Law Amendment Act (1852) made significant advances, such as patent publication and the establishment of a centralized registration system, which made the patent process more accessible and transparent.[137]

Following the British legal rule, Sri Lanka issued its first patent on 22nd November 1860.[138] Sri Lanka followed the same British system regarding the exclusive right of the

[135] D. M. Karunaratna, "Issues Related to the Enforcement of IP Rights: National Efforts to Improve Awareness of Decision Makers and Education of Consumers," document presented to the WIPO Advisory Committee on Enforcement, WIPO/ACE/3/5, Third Session, Geneva (2006), 15–17.
[136] G. Krishna Tulasi and B. Subba Rao, "A Detailed Study of Patent System for Protection of Inventions," *Indian Journal of Pharmaceutical Sciences* 70, no. 5 (2008): 547.
[137] Sean Bottomley, "Patents and Technology," in *The British Patent System during the Industrial Revolution 1700–1852: From Privilege to Property*, Cambridge Intellectual Property and Information Law (Cambridge: Cambridge University Press, 2014), 175–294.
[138] Asanka Perera, "Administration of the Patent System in Sri Lanka: A Critical Appraisal," *Common Law World Review* 43, no. 4 (2014): 344–376.

inventor over his invention. On top of that, this Act is considered a milestone in IP legal history.

### 3.5.2 Patent Ordinance (1907)

After 48 years, the British Inventors' Ordinance (1859) was eventually replaced by the Patent Ordinance of 1907. The Act came into force on 1st January 1907 with a substantial expectation regarding the modifications to Sri Lanka's intellectual property rules. The Act enhanced the legal framework for issuing and regulating patents, matching Sri Lanka's patent laws with British principles from the early twentieth century.[139]

After 72 years, the Act was replaced by the Code of Intellectual Property Act No. 52 of 1979.[140] The Act offered a clearer definition, visible structural innovations, and established specific patent eligibility rules, along with detailed registration and enforcement processes.

Further, the law introduced dispute resolution systems that ensure patent holders receive legal remedies if there is any infringement. Furthermore, the Act shaped Sri Lanka's intellectual property law, particularly patent law, by emphasizing exclusive rights that protect innovators from unauthorized use or commercialization of their inventions.[141]

---

[139] Patent Ordinance (1907), ⟨https://www.srilankalaw.lk/revised-statutes/alphabetical-list-of-statutes/532-patent-ordinance-1907.html⟩ (accessed 23 February 2025).
[140] National Intellectual Property Office of Sri Lanka, "*History of Patent Law in Sri Lanka*," <https://www.nipo.gov.lk/web/index.php?option=com_content&view=article&id=15&Itemid=146&lang=e. > (accessed 23 February 2025).
[141] South Centre, "Neglected Dimension of the Inventive Step as Applied to Pharmaceutical and Biotechnological Products: The Case of Sri Lanka's Patent Law," ⟨https://www.econstor.eu/bitstream/10419/278606/1/1855951452.pdf⟩ (accessed 23 February 2025).

### 3.5.3 Code of Intellectual Property Act No. 52 of 1979

The Code of Intellectual Property Act No. 52 of 1979 was one of the benchmark Acts in Sri Lanka's intellectual property (IP) history. The law came into force with the ambition of replacing previous laws regarding IP legislation in Sri Lanka.[142] And for the first time, the law provided the country with comprehensive protection for all areas of intellectual property, such as patents, trademarks, copyrights, industrial designs, and trade secrets, under one legal framework.

The Act came into effect on 2nd August 1979 with some principles to revise, integrate, and simplify the country's intellectual property laws. So the law can be seen in one single book. With the help of this Act, the country's first national intellectual property office (NPO) was established in 1980.[143] It is an independent government department directly under the Ministry of Commerce. Moreover, in Sri Lanka's history, for the first time, all IP-related matters were centralized under one authority, meaning that this was really a big milestone in Sri Lanka's legal and administrative approach to intellectual property law.

The Act also introduced for the first time structured procedures for obtaining and enforcing rights related to trademarks and patents. The title of Registrar of Patents and Trademarks was created, with his responsibilities including oversight over patents,

[142] Code of Intellectual Property Act 1979 (Act 52), <http://www.commonlii.org/lk/legis/num_act/coipa52o1979356/> (accessed 23 February 2025).
[143] National Intellectual Property Office of Sri Lanka, "History of Intellectual Property Law in Sri Lanka."

trademarks, industrial design registrations, and so forth. A number of patenting criteria were also established by the law, such as novelty and inventiveness. It also stipulated the process of applying for patents, examining applications, and issuing patents itself, to try and give inventors a strong legal basis on which they can rely to protect their creations.

Apart from patents, the Act imposed some fresh rules for industrial designs and copyrights; therefore, it helped to enhance creator protection in many sectors. Moreover, the Act also increases the infringement remedies during resolution and enforcement. Further, it laid the foundation for a better IP legal system in Sri Lanka as it imposed guaranteed improved protection, unambiguous legal processes, and adherence to international criteria. The Act was in force for more than two decades and was later replaced by the Intellectual Property Act No. 36 of 2003.

### 3.5.4 Intellectual Property Act No. 36 of 2003

The current principal law that manages Sri Lanka's IP laws is the Intellectual Property Act No. 36 of 2003. It came with the update and replacement of the Code of Intellectual Property Act No.52 of 1979. The Act included significant amendments and modifications aligned with international protocols and norms.[144] The Act came into force on 12th November 2003, introducing a comprehensive framework for several kinds of IP

[144] P. H. N. Sampath, "The Law of Unfair Competition: International, European and Sri Lankan Perspectives," *Sri Lanka Journal of International Law* 20 (2008): 99.

compartments, such as patents, copyrights, trademarks, geographical indications, and layout designs according to the TRIPS agreement.[145]

This Act excludes several products that could be considered as patents, such as scientific discoveries, mathematical approaches, theories, and several classes of biological processes. This is to ensure that the legislation is in line with the international protocols and has a balanced approach between ethics and innovations[146].

Besides, under the 2003 Act, sole power is awarded to the National Intellectual Property Office (NIPO) for handling and registering IP rights in the nation. As a result, the Director General now has to oversee the process of registering and enforcing the implementation of all IP laws. Because of the Act being introduced, Sri Lanka now ensures stronger protections for creators, businesses, and inventors, as well as sets the country's policies according to international standards.

### 3.6 PATENT LAW OF SRI LANKA

The ideology of innovation and patent protection has been in existence for a long period of time. During the Greek era, patent protection was given for one year, which means the inventors were given exclusive rights year over their invention. This laid down the foundation for the development of patent protection law, where the first codified document was printed in Venice in 1474 under the name of "inventors by law." This Act has made a

---

[145] Murugesu & Neelakandan, "Intellectual Property," <https://www.neelakandan.lk/Compendium%20of%20Law/Intellectual_Property.php> (accessed 23 February 2025)

[146] U.S. Department of Commerce, "Sri Lanka – Protecting Intellectual Property," <https://www.trade.gov/country-commercial-guides/sri-lanka-protecting-intellectual-property> (accessed 23 February 2025).

major contribution to today's patent protection law and encourages investors to innovate more.

Sri Lanka's patent law has been updated over the years to keep pace with international and technological changes. The main law controlling patents in the country is the Intellectual Property Act No. 36 of 2003. Even though the Act does not state what a patent is, it lays out the parameters for determining if patent rights can be obtained.[147]

Section 63[148] states that, other than invention, it shall not be protected under the patent protection. Meanwhile, Section 62 defines what innovation is as it states that an invention is something that offers a solution to a technical problem. That means there should be a genuine technical problem in society, and that problem can be solved only by a skilled person. Further, the problem should also be realistic, not a theoretical problem or an abstract notion.[149] The Act also requires that innovations be relevant to specific technical domains, such as engineering, manufacturing, or software development, rather than just commercial or economic methods.

Apart from that, Sri Lanka's patent system is consistent with international norms, notably the TRIPS Agreement, assuring compliance with worldwide intellectual property regulations. Article 29 of TRIPS Agreement clearly state that only inventions can be patentable. To illustrate that, the European Patent Convention (EPC), excluding pure

---

[147] Bêrÿl Nånåyåkkårë, "Lesson 12: Intellectual Property Law," <https://www.academia.edu/21737574/Lesson_12_Intellectual_Property_Law_Intellectual_Property_Law> (accessed 4 March 2025).
[148] Intellectual Property Act No. 36 of 2003 (Sri Lanka), § 63.
[149] Julie E. Cohen and Mark A. Lemley, "Patent Scope and Innovation in the Software Industry," *California Law Review* 89 (2001): 1.

commercial procedures from patent eligibility because those are not considered as an invention. For example, while marketing methods such as "super-sizing" fast-food deals or giving customer loyalty programs are creative in business, they lack the technical nature essential for patent protection. Rather, patents are reserved for inventions that contribute to scientific growth and give useful, technical answers to real-world issues.[150] Even though Sri Lankan law is not bound to follow EPC procedures, as the researcher discussed earlier the EPC is more comprehensive and detailed than Sri Lankan IP law. So, the policymakers may consider the example given by EPC to illustrate what does mean by invention with technical problem in patent law.

Section 63 of Sri Lanka's Intellectual Property Act No. 36 of 2003 outlines three key characteristics for an invention to be eligible for patent protection: originality (newness), inventive step (non-obviousness), and industrial application. The term "novelty" suggests that the invention must be entirely new and had not previously been known or disclosed anywhere in the world prior to the filing or priority date of the patent application. In other words, if an identical idea already exists or has been widely used prior to the filing date, it cannot be patented. Section 64(1) of the Act stipulates that an invention loses its originality if it is made publicly available before the patent application is filed.

A best example is illustrated in *Dialog Axiata PLC v. Orleander International Ltd.*[151]. The case was about whether Patent No. 14841, regarding a mobile money transfer

[150] European Patent Office, "Is It Patentable?", <https://www.epo.org/en/new-to-patents/is-it-patentable> (accessed 4 March 2025).
[151] *Dialog Axiata PLC v Orleander International Ltd [2024] CHC/12/2013/IP.*

system, was valid and whether it was infringed by the plaintiff. Dialog Axiata PLC, Sri Lanka's largest mobile network operator, filed a lawsuit seeking a declaration that it had not infringed on the patent owned by Orleander International Ltd., which was originally invented by the late Harold Prianne Anurath Wijetunge. The plaintiff stated that their mobile money service did not violate the defendant's patent and asked the court to declare the patent as prior art and thus it is unfair for defendant to file patent as his own invention. Specifically, the plaintiff pointed out to the 2nd Defendant's own innovation patent applications filed in Australia (2006) and the United Kingdom (2006) as evidence that the invention was not new. After reviewing the case, the court ruled that these earlier patents constituted prior art, meaning the invention had already been publicly disclosed before the Sri Lankan patent application was filed.

Furthermore, Section 65 of the Intellectual Property Act No. 36 of 2003 states that for an invention to be eligible for patent protection, it must have inventive steps. The inventive step requirement ensures that an invention is not just a simple or obvious improvement that anyone with basic technical knowledge could come up with. In other words, the solution to the problem must involve a level of creativity or innovation that goes beyond what an ordinary person skilled in the relevant field would naturally think of[152].

When assessing a patent application, NIPO examines whether the proposed solution would have been obvious to an expert in the field based on existing knowledge. If the invention is something that a professional in the industry could easily deduce using

[152] South East Asia Journal of Contemporary Business, Economics and Law, "Patenting Software Related Inventions in Sri Lanka," *SEAJBEL* 12, no. 2 (April 2017): 71–72, <https://seajbel.com/wp-content/uploads/2017/05/BUS-326.pdf>.

common technical expertise, it may not qualify for patent protection.[153] This requirement ensures that patents are granted only for truly innovative and non-obvious advancements, rather than minor modifications of existing ideas. This principle was highlighted in the case of *Dialog Axiata PLC vs. Orleander International Limited*, where the plaintiff argued that the patented process was merely an obvious application of existing ICT techniques. The court applied the Windsurfing/Pozzoli test to assess the level of inventiveness and determined that the claimed invention lacked an inventive step. The ruling concluded that the process was simply a predictable extension of existing technology, rather than a genuinely novel innovation deserving of patent protection.[154]

In addition to this, Section 63 of the Intellectual Property Act No. 36 of 2003 also mentions industrial application as one of the required preconditions for acquiring patent protection. Whether an innovation can really be used is what determines usefulness in any field, including manufacturing, agriculture, drugs, technology, or whatever else. That signifies that if an innovation qualifies during the examination as it can be used in the industrial sector, then it will be protected by a patent in Sri Lanka. But if the invention is not relevant, it is not proven that it may be employed in an industrial application, then it will be denied by NIPO. Hence, in short, under the Intellectual Property Act No. 36 of 2003, for an invention to be eligible for protection by a patent, the following three requirements should be met: novelty, an inventive step, and industrial application. If an innovation does not fulfill any one of these conditions, the application will be refused.

[153] Lanka Law, "eZ Cash Non-Infringement and Validity of Patent,"<https://lankalaw.net/2025/01/08/ez-cash-non-infringement-and-validity-of-patent/> (accessed 4 March 2025).
[154] Ibîd.

The goal of these strict guidelines is to keep low-quality innovations from being patented and to prevent individuals from claiming ownership of another' work. This method fosters true creativity and technical advancement by ensuring that only truly unique and beneficial ideas are protected. Furthermore, it strengthens Sri Lanka's commercial and industrial sectors, promoting growth while avoiding unauthorized duplication of current ideas.

### 3.7 AI-GENERATED PATENTS AND SRI LANKA'S PATENT LAW

Like other legal systems, the Sri Lankan legal structure also does not have extensive experience with AI-related matters, particularly with AI-generated patent laws. Technology is advancing much faster than the legal system in the world, but the legal sector cannot compete with it, including Sri Lankan legislation.[155] Hence, the legal gap between the AI-generated invention and the laws regarding it should be discussed.

The Intellectual Property Act No. 36 of 2003 is the main governing legislation of Sri Lanka's IP law. The Act does not recognize AI as an inventor or mention it specifically in this law at any point of area. That means the Act did not go through a major amendment recently. In the Act, when talking about the inventor, terms like "person" or "him" are referred to human inventors only. This indicates Sri Lanka still follows the conventional

[155] Kaushalya Wickramanayake, "Factum Special Perspective: Redefining Copyright Laws – Addressing AI-Generated Works and Authorship Rights in Sri Lanka," *Factum Perspectives*, <https://factum.lk/tech-cooperation/factum-special-perspective-redefining-copyright-laws-addressing-ai-generated-works-and-authorship-rights-in-sri-lanka/> (accessed 11 September 2024).

legal structure, which only accepts human inventors. Section 67(2), which talks about joint patents, expressly uses the term “person” when referring to the inventor.[156]

Furthermore, the Act does not speak about software patents, computer program patents, and AI-generated innovations, which lead to a legal discussion among scholars. Further, some legal scholars believe that the silence about the law may give an opportunity for patenting computer programs and AI inventions. However, the Act's repeated reference to the inventor as a "person" suggests that AI-generated ideas may encounter major legal obstacles in being acknowledged under the existing structure.

Sri Lanka, like many other nations, has neglected to modernize its intellectual property rules to reflect the specific issues provided by AI-related patents. For the time being, the legal system is still primarily concerned with human inventors, leaving AI-generated creations in the dark about whether they can be patented or who owns them.

Meanwhile, on February 17, 2025, Sri Lanka's Information and Communication Technology Agency (ICTA) announced the establishment of a ten-member National AI Advisory Committee. This committee wants to develop a National AI Strategy in conjunction with the broader Digital Economy Strategy. It is responsible for connecting AI activities with government goals, finding high-impact projects to improve public services, and offering expert guidance on regulatory frameworks, infrastructure

[156] Intellectual Property Act No. 36 of 2003 (Sri Lanka), § 67(2).

development, talent upgrading, research and development, and the construction of AI centers.[157]

This measure demonstrates Sri Lanka's commitment to embracing artificial intelligence and anticipates potential achievements in domains such as AI-generated patents. Currently, Sri Lanka's Intellectual Property Act No. 36 of 2003 does not explicitly address AI-generated ideas or recognize AI as an inventor. The creation of the AI Advisory Committee may spark discussions about changing intellectual property regulations to suit AI-driven breakthroughs. As AI advances, Sri Lanka's proactive strategy might position it to efficiently integrate AI technology into its legal and economic frameworks.[158]

[157] ICTA Sri Lanka, "Sri Lanka Appoints National AI Advisory Committee to Drive AI Strategy," <https://www.icta.lk/sri-lanka-appoints-national-ai-advisory-committee-to-drive-ai-strategy> (accessed 17 February 2025).
[158] News First Sri Lanka, "Sri Lanka Appoints National AI Advisory Committee to Drive AI Strategy," YouTube video, 5:30, posted 18 February 2025, <https://www.youtube.com/watch?v=8pRLT9d9JHA>.

# CHAPTER FOUR

# IMPLICATIONS OF PATENT PROTECTION FOR AI-GENERATED INVENTIONS UNDER SRI LANKAN IP LAW

## 4.1 INTRODUCTION

This chapter shall compare the international legal standards governing patent law with the current legal position of Sri Lankan patent law. Through that, the study will seek to identify any gaps, inconsistencies, or ambiguities within the Sri Lankan legal framework in relation to the protection of AI-generated inventions. This assessment will further explore whether the existing Intellectual Property Act No. 36 of 2003 sufficiently addresses the emerging challenges posed by artificial intelligence or whether legislative reform and policy amendments are necessary to ensure Sri Lanka's compliance with evolving global standards.

Artificial intelligence (AI) is a rapidly growing field with the potential to alter many industries in the global economy, including healthcare, banking, and transportation. As AI advances, it becomes increasingly vital for legal experts and legislators to set explicit legislation to guarantee that it stays properly governed and controlled. This needs a well-defined legal framework that considers the consequences of AI-generated inventions.

Patents are essential for safeguarding AI developers' rights, limiting the unlawful use of their innovations, and stimulating future technical developments. However, as the researcher previously stated, an increasing difficulty occurs when AI becomes the lone inventor, creating patents without human input. Despite these advancements and problems, the majority of existing intellectual property laws, including Sri Lanka's Intellectual

Property Act of 2003, do not specifically address the issues and rules surrounding AI-generated patents. The lack of legal rules on the subject has provoked discussions among academics and legal experts about the recognition and ownership of AI-generated creations. Given this ambiguity, there is an urgent need for debates and studies into how AI-generated patents should be dealt with under Sri Lanka's legal system. This chapter will examine diverse viewpoints from legal experts, court rulings, and the existing condition of Sri Lankan intellectual property law to evaluate whether changes are required to accommodate AI-generated inventions while adhering to moral and legal standards.

Furthermore, the study will discuss whether legal principles governing AI-generated patents in other countries may be immediately incorporated into Sri Lanka's intellectual property laws or must be modified to fit the country's legal and cultural setting. Finally, this chapter will make recommendations on how Sri Lanka may implement a balanced approach to AI patent legislation that ensures justice, fosters innovation, and complies with international norms.

## 4.2 ISSUES IN THE PATENTABILITY STANDARD OF AI- AI-GENERATED INNOVATIONS

For an innovation to qualify for patent protection, it must fulfill strict legal conditions. These standards are created by the World Intellectual Property Organization (WIPO), and as a WIPO member, Sri Lanka is expected to conform to these requirements.[159] According to WIPO standards, an innovation must first be eligible for patent protection, meaning it fits within the legally recognized area of patentable subject matter. Additionally, it must

[159] Jochen Pagenberg, "The WIPO Patent Harmonization Treaty," *AIPLA Quarterly Journal* 19 (1991): 1.

meet three important requirements: originality, non-obviousness (inventive step), and industrial application.[160]

Novelty ensures that the invention is entirely new and has not been disclosed anywhere in the world before the patent application is filed. Non-obviousness means that the invention must not be an expected improvement that an expert in the field could easily develop. Industrial applicability requires that the invention has practical use in industries such as manufacturing, agriculture, or technology. When it comes to AI-generated patents, whether an AI system is listed as the sole or partial inventor, the invention must still meet these patentability standards. However, Sri Lanka's Intellectual Property Act No. 36 of 2003 does not explicitly recognize AI as an inventor, as the law is silent on this issue.[161]

This legal ambiguity creates challenges for patent applications that list AI as the sole creator. Since such applications may not meet the legal definition of an inventor, the National Intellectual Property Office (NIPO) of Sri Lanka is likely to reject them in accordance with both domestic laws and international patent regulations. Therefore, in this chapter, the researcher will discuss all the key requirements for patentability, examine scholarly opinions, and analyze their applicability to Sri Lankan law. The aim is to determine whether these principles align with Sri Lanka's legal culture and whether amendments to the existing law are necessary.

[160] Pagenberg, "WIPO Patent Harmonization Treaty," 1.
[161] Chaga Bihari Mahingoda, "Intellectual Property Rights in the Era of Artificial Intelligence: Navigating the Challenges and Expanding the Boundaries," in *Proceedings of the SLIIT International Conference on Advancements in Sciences and Humanities* (Sri Lanka Institute of Information Technology, 2023), 206–216.

### 4.2.1 Novelty

The literal meaning of "novelty" refers to something new or unique.[162] In the context of patents, novelty is determined by comparing the features of an invention to existing innovations.[163] For an invention to be considered novel, at least one of the features must differ from prior inventions. In other words, the invention must be new compared to any publicly available prior art before the filing date of the patent application. However, if someone claims they were already using the innovation before the patent application was filed, they must provide evidence proving prior use of that particular invention.[164] As discussed earlier, only technical solutions to technical problems are considered novel under patent law.

On the other hand, when it comes to AI-generated patents, questions arise regarding novelty, as AI systems rely on training data sourced from existing information. This raises concerns about whether an AI-generated invention is genuinely new, given that AI recombines pre-existing knowledge and patent features. However, a counterargument can be made that even human inventors build upon prior knowledge and existing data, which means there is no new knowledge anymore. The key distinction lies in whether the AI-generated output is identical to a prior invention, even if that prior invention was not widely

[162] Edita Baranskaitė and Daiva Labanauskaitė, "The Concept of Innovation in the Approach to Novelty, Value Creating, Interaction Processes and Social Progress," *Regional Formation & Development Studies* 31, no. 2 (2020).
[163] Sean B. Seymore, "Rethinking Novelty in Patent Law," *Duke Law Journal* 60 (2010): 919.
[164] Tiia-Riikka Kittilä, "Novelty | How Novelty of an Invention Is Determined?," *Laine Intellectual Property*, <https://www.laineip.fi/en/novelty-how-novelty-of-an-invention-is-determined/> (accessed 12 September 2022).

known. If an invention is substantially the same as an existing one, it may lack novelty and fail to qualify for patent protection.[165]

To explain that, some contemporary legal scholars argue that[166] true novelty is nearly impossible to achieve in today's world, as most ideas and data have already been discussed, analyzed, or modified in some forms. With millions of pieces of information available, many so-called "new" inventions are often just improvements or alterations of existing knowledge. In the case of AI-generated patents, AI systems analyze vast amounts of data from the internet, identify patterns, and make modifications to create something that appears new. However, this process is not entirely different from what human inventors do. They also gather information, analyze it, and develop their own innovations based on prior knowledge. Because of that, there should be clearer and more updated guidelines on novelty, one that recognizes AI as an inventor.[167] Their reasoning is that since AI follows a similar procedure to human inventors in developing new discoveries, it should not be barred from patent protection. The researcher also endorses this approach, underlining the necessity for clear legal standards on innovation in the current day, guaranteeing that AI-generated discoveries are properly judged under intellectual property laws.

Apart from that, there is an ongoing discussion regarding whether AI-generated ideas, if regarded as new, may represent a danger to human creativity. One important issue is that AI has access to large volumes of data, which it can examine swiftly, recognizing and changing previous inventions considerably more effectively than humans. While

---

[165] DLA Piper, "AI as Inventor: Legal Challenges and Implications for Patent Law," <https://www.dlapiper.com/en/insights/publications/law-in-tech/ai-as-inventor-legal-challenges-and-implications-for-patent-law> (accessed 13 February 2025).
[166] DLA Piper, "AI as Inventor."
[167] Abbott, "Artificial Inventor Project."

human inventors have limited access to data and take substantial time to investigate and create new ideas, AI can rapidly compare its outputs with earlier creations and make modest tweaks to claim uniqueness.[168] This poses a risk that AI-generated patents might dominate human-driven innovation.

Moreover, AI lacks the ability to assess the societal consequences of its creations. Unlike human inventors, who weigh ethical, safety, and social welfare elements before creating new inventions, artificial intelligence (AI) has no feelings, moral intuition, or intuitions about human well-being.[169] For example, the potential danger of an invention for various groups, such as children, pregnant women, and people with health problems, has to be assessed. And a human inventor can weigh those risks and determine whether an invention is useful to society or may damage society or the environment. But AI, based on data and algorithms alone, is unable to think about these values, and this is precisely where things can go wrong.

Hence, the addition of AI as a creator is a matter of time, today or tomorrow. However, before this becomes a reality clear rule should be determined for AI-inventions. The World Intellectual Property Organization (WIPO) is actively working on developing such frameworks to address these challenges.[170] Similarly, in the Sri Lankan context, the Intellectual Property Act No. 36 of 2003 has not undergone significant amendments since its enactment. Given the rapid advancements in AI, there is a pressing need for legislative

[168] Lexology, "Challenges to Patenting AI-Generated Inventions," 2 April 2024, <https://www.lexology.com/library/detail.aspx?g=442443d6-3420-4142-b830-2b01a4e09c95>.
[169] Juan Martinez-Miranda and Arantza Aldea, "Emotions in Human and Artificial Intelligence," *Computers in Human Behavior* 21, no. 2 (2005): 323–341.
[170] Abbott, "Artificial Inventor Project."

reforms to determine whether AI should be recognized as an inventor and to establish appropriate legal mechanisms for handling AI-generated patents.

### 4.2.2 Non-Obviousness or Inventive Steps

The patent system is built on incentive theory, which argues that patents encourage innovation by protecting inventors from free riding.[171] Another justification is the natural rights theory, inventions as intellectual property worthy of ownership, as long as they do not excessively hinder societal advancement. Non-obviousness, or the inventive step, is a key requirement in patent law to prevent monopolies on trivial improvements. Without it, excessive patents could stifle innovation. Further, patents also promote knowledge sharing, as inventors disclose technical details in exchange for exclusive rights, aligning with the social contract theory.

Patent law is supported by both ex-ante (justifications for granting patents) and ex post (benefits after invention) perspectives.[172] However, balancing these theories is the biggest challenge, as too many patents can overwhelm the system, while overly strict policies can discourage innovation. In the U.S, Section 103 of the Patent Act defines non-obviousness using the Person Having Ordinary Skill in the Art (PHOSITA) standard. This means that an invention is considered non-obvious if someone with ordinary skills in the relevant field did not find it obvious at the time of the invention. The Supreme Court, in

[171] Mark A. Lemley, "Property, Intellectual Property, and Free Riding," *Texas Law Review* 83 (2004): 1031.
[172] Mark A. Lemley, "Ex Ante versus Ex Post Justifications for Intellectual Property," *University of Chicago Law Review*(2004): 129–149.

landmark cases like *Graham v. John Deere*[173] *and Mayo v. Prometheus*[174] clarified that objective factors such as commercial success, long-felt but unsolved needs, and prior failed attempts can support a finding of non-obviousness. For example, if a product achieves commercial success by effectively solving a problem that earlier inventions failed to address, that success may indicate the invention was not obvious.

Additionally, U.S. patent law states that the method of creation of how an invention was developed does not affect patentability.[175] In other words, the focus is on the final product, not the process used to create it. This raises important questions about AI-generated inventions. If an AI system, without any human intervention, produces an invention that is novel and distinct from prior art, should it be evaluated under the same PHOSITA standard?

Given that AI can process massive datasets and outperform human reasoning in a short time, it can potentially produce inventions that no human would have conceived. Yet, if U.S. law only examines the final outcome and not the method of creation, then an AI-generated invention might still qualify as non-obvious so long as it is different enough from previous inventions. These are complex issues that require further legal and policy discussion as AI continues to evolve.

On the other hand, the European Patent Office (EPO) follows the problem-solution approach to determine inventive step. This method involves several steps. First, the closest

[173] *Graham v John Deere Co of Kansas City 383 US 1 [1966].*
[174] *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (2012).
[175] U.S. Patent and Trademark Office, *Manual of Patent Examining Procedure*, § 2113, "Product-by-Process Claims," last modified June 2020, <https://www.uspto.gov/web/offices/pac/mpep/s2113.html>.

prior art is identified.[176] This means finding an existing invention that is most similar to the new invention in terms of technical aspects and problem-solving methods. If the new invention shares similar features with the closest prior art and does not introduce a significant improvement, it will not be considered non-obvious (i.e., it lacks an inventive step).

Afterward, the EPO examines the technical problem that the invention aims to solve.[177] This refers to the gap or challenge in the current state of knowledge (prior art) that the new invention addresses. Essentially, for an invention to be patentable, it must offer a solution to a technical problem that was not previously resolved. Finally, after identifying the technical problem, the EPO assesses whether the proposed solution would have been obvious to a person skilled in the art. The EPO evaluates inventive step using a hypothetical skilled person who is someone with routine expertise and knowledge in the field but without inventive creativity. If a solution is something that this notional person could easily deduce from existing knowledge, then the invention is not considered to involve an inventive step.

This raises a significant debate when it comes to AI-generated inventions. Unlike a skilled human, AI systems can analyze vast amounts of data rapidly and identify patterns or solutions that may not be obvious to a human.[178] As a result, an AI-generated invention might more easily meet the inventive step requirement, simply because it surpasses the

---

[176] European Patent Office, *Guidelines for Examination in the European Patent Office*, Part G, Chapter VII, Section 5.1, "Problem-Solution Approach," last modified March 2024, <https://www.epo.org/en/legal/guidelines-epc/2024/g_vii_5_1.html>.
[177] Aurora Plomer, "The EPO as Patent Law-Maker in Europe," *European Law Journal* 25, no. 1 (2019): 57–74.
[178] Martin Müller, "Issues in Patenting 'Artificial Intelligence' from an EPO Perspective," *Journal of Intellectual Property Law & Practice* 19, no. 3 (2024): 201–202, <https://academic.oup.com/jiplap/article/19/3/201/5867031>.

analytical abilities of a human expert. This discrepancy suggests that current EPO standards may not be fully equipped to assess the inventive step in AI-generated inventions. If AI continues to evolve as a common tool or independent creator, the law may need to be reviewed and adapted to ensure a fair and balanced assessment of inventive steps in this new context.

Based on the above, the concept of non-obviousness or the inventive step serves a similar purpose across jurisdictions like the U.S. and Europe: to prevent patents from being granted for minor or trivial improvements that a person skilled in the field could easily come up with. This helps protect existing inventions from being copied or slightly modified and then claimed as new. Typically, this skilled person is assumed to have a moderate level of expertise— neither a genius nor a novice capable of recognizing if something has already been invented or if the improvement is too obvious.

But with AI-generated inventions, it is a little more complicated. AI can analyze enormous sets of data and can identify tiny distinctions that even experienced practitioners might miss. What this means is that an AI could create a product that is a slight variant on a current item that looks like something new to a human expert but is only a polished, improved version of what human has seen before. Consequently, novelty and non-obviousness can be attributed to such inventions even though the latter may not even amount to activity involving an inventive step as traditionally conceived.

Hence, to keep pace with the rapid rise of AI-generated inventions, it is necessary to revisit and review the eleventh legislation regarding the non-obviousness test, including Sri Lanka. A key step in this process is to establish clear and simple guidelines for what should be considered analogous, neighboring, or related fields of prior art. Under the

current legal framework, only "analogous" prior art, meaning inventions from the same or closely related field, can be used to evaluate non-obviousness, while non-analogous art is typically excluded.

To address the challenges posed by AI, a broader interpretation or even an amendment to the law is needed. Expanding the scope of what counts as relevant prior art would make it easier for examiners to determine whether an invention is truly new and creative or just a predictable variation of existing knowledge. This would help curb the "race to patent" simple modifications and ensure that genuine innovations are protected.

This issue was evident in the case of *Dialog Axiata PLC v. Orleander International Ltd. (2023).*[179] In this case, the plaintiff argued that the defendant's patent was obvious to someone with knowledge of ICT and applied the windsurfing/Pozzoli test, ultimately concluding that the invention lacked an inventive step. Despite this, NIPO had already granted Patent No. 14841 in 2008 to the defendant for a system that enabled mobile cash transfers (eZ Cash). If a more thorough examination of prior art had been conducted, especially beyond narrowly defined analogous fields, this patent might not have been granted. The case highlights the need for more robust and inclusive examination standards to prevent unjustified patent approvals and protect rightful innovation.

Therefore, when evaluating non-obviousness, it is important to also consider technological progress, especially the growing role of AI. As discussed earlier, AI can easily bypass current systems used to assess non-obviousness. That is why, the researcher considers, it is advisable for Sri Lankan policy makers to adopt a combined the European

[179] *Dialog Axiata PLC v Orleander International Ltd [2024] CHC/12/2013/IP.*

approach align more closely with the U.S. if they agree to amend the Sri Lankan IP Law; where a person skilled in the art is expected to have not just technical knowledge but also a basic level of creativity. This would make it harder for someone with only general computer knowledge to falsely claim ownership of an AI-generated invention. If the law clearly defines that a person must have both skill and creativity in the relevant field, it can help prevent misuse and fake claims of invention over AI-generated work.

To Illustrate that, how could someone claim they invented a solution to a complex technical problem without having done any research or experiments? Requiring research ability as part of the definition of a "person skilled in the art" would help ensure that only those truly qualified can claim such inventions.

Apart from that, it is a fact that AI is much faster and has access to a far larger amount of data than humans. So, when it comes to evaluating non-obviousness in inventions involving AI, it might actually be necessary to include AI itself in the review process. Since AI can quickly analyze massive sets of information, it could help detect whether an invention includes features or elements taken from existing work. This could make it easier to judge the credibility of non-obviousness and prevent people from getting patents for ideas that are not truly original.

Overall, if AI-generated inventions are to be accepted in the future, changes to the current legal standards for non-obviousness will be necessary, especially to stop people from falsely claiming ownership of inventions they did not truly create.

### 4.2.3 Industrial applicability

To qualify for patent protection, an invention must demonstrate industrial applicability, meaning it must be capable of being made or used in some form of industry. This requirement ensures that the invention provides practical utility and contributes meaningfully to society. The definition of "industry" is broad and includes sectors such as agriculture, healthcare, and information technology, in addition to traditional manufacturing. In contrast, inventions that are purely theoretical or lack the ability to resolve a concrete technical problem do not fulfill this requirement. Industrial applicability requires that an invention has tangible, real-world use beyond abstract concepts or speculative ideas.

As the researcher discussed earlier, Sri Lanka's Intellectual Property Act of 2003 is based on traditional patent law principles, where only human beings are recognized as inventors. This is similar to the approach taken by other major jurisdictions such as the USPTO (United States), EPO (Europe), UKIPO and South African IP Law. One of the main arguments behind this position is that traditional patent systems were built on the assumption that a human is the inventor. Humans not only serve as the legal threshold for evaluating utility and industrial applications, but they also bear responsibility and liability. Meaning that they may be held accountable or sued in the case of a legal conflict. However, in the case of AI-generated innovations, this presents an essential question: who is the party accountable, and who fulfills the legal conditions for utility and industrial application if no human is actively involved?

Legal expert Ryan Abbott believes that granting patents to AI-generated ideas purely because there is no human creator is not acceptable and outdated. He points out that

when the current patent rules were drafted, autonomous AI systems did not exist or were not even meant to. As a result, these regulations are inadequate to address the intricacies of current AI. Abbott further claims that failing to acknowledge AI as an inventor hampers innovation in the field of artificial intelligence. According to him, several valuable inventions created by AI have failed to receive patent protection simply because the law does not acknowledge AI as an inventor even when the invention clearly meets all the required patentability criteria.[180] For this reason, Abbott strongly believes that AI should be recognized as an inventor if it fulfills all the requirements.

In contrast, Andrew Torrance believes that in order for an innovation to be eligible for patent protection, its utility must be clearly tied to the intention and knowledge of the human creator. From his perspective, the human sector is critical in the creation of the patent process. Without it, there is a significant risk that patent systems will be overwhelmed with AI-generated innovations that have not been properly verified or vetted using relevant human input. This might reduce the overall value and purpose of the patent system.[181]

His argument is rooted in a long-standing legal principle: only a person who has made a clear and significant intellectual contribution can be considered an inventor. Courts have consistently upheld that inventorship involves a human forming a definite and functional idea, not just approving what a machine has produced. This is to clarify that patents are human creativity and production of a technical expertise, rather than automated outputs from AI systems.

[180] Abbott, *The Reasonable Robot*, 7.
[181] Bill Tomlinson, Rebecca W. Black, Donald J. Patterson, and Andrew W. Torrance, "The Carbon Emissions of Writing and Illustrating Are Lower for AI than for Humans," *Scientific Reports* 14, no. 1 (2024): 3732.

Torrance also stated a balanced approach: the more a person is involved in creating an innovation, the greater the basis for patent protection. This is because humans are often generating ideas that have actual benefits for society, rather than providing merely theoretical outputs such as AI. On the other hand, if an AI system generates an invention without any human input, it should not qualify for a patent, as it may lack practical relevance.

Additionally, AI systems largely rely on massive datasets, and much of the data currently available on the internet has been created by other AI systems. This creates a cycle where AI depends on AI-generated data to produce new inventions, which could eventually lead to AI having complete control over the invention process. Therefore, if AI were allowed to be recognized as an inventor without human oversight, it could undermine human creativity and control.

Apart from that, Mark Lemley and Bryan Casey argue that most AI-generated outputs do not qualify as true inventions in the traditional sense. Instead, they describe these outputs as computational extrapolations-results produced by algorithms that extend or recombine existing information, rather than demonstrating genuine inventive creativity or insight. According to Lemley and Casey, AI systems process vast datasets, detect patterns, and generate new outputs based on those patterns, but this process lacks the creative problem-solving and conceptual leaps typically associated with human inventors.[182]

As a result, Lemley and Casey warned that AI-generated products should not be patentable, especially when there is no convincing proof of existing or

[182] Mark A. Lemley and Bryan Casey, "Remix and Reuse in the Innovation Economy," *Stanford Law Review* 70, no. 5 (2019): 1017–1076, <https://www.stanfordlawreview.org/print/article/remix-and-reuse-in-the-innovation-economy/>.

potential industrial use. Simply producing a new patent or design using AI does not ensure the practical aspect of real-life challenges and solutions for that, and patent systems should not protect outputs that are entirely theoretical or speculative.[183]

To overcome these difficulties, they recommend modifying patent regulations to oblige applicants, whether human or AI developers, to prove industrial application through genuine proof. This may be done by applying a requirement for producing functioning prototypes, experimental data, or realistic simulations to prove that the invention is functional and usable in practice, rather than merely a theoretical output of an algorithm. Further, by focusing on practical, useful innovations that bring actual technological or social advantages, this strategy would help avoid patent offices from being inundated with AI-generated findings that lack true real-world value.[184]

Another crucial problem when analyzing industrial applications for AI-generated ideas is the extent of the invention's sector. Some inventions, particularly in sensitive areas, require actual experimentation and study before they can be properly brought to society. Without such confirmation, the idea might entail substantial dangers.

For example, an AI-generated software invention must demonstrate that it can actually function and solve a real-world problem efficiently. In the pharmaceutical sector, industrial applicability would require laboratory testing or clinical trials to prove that an AI-developed or optimized drug is both safe and effective for human use. In materials science, it would be necessary to physically test the new material to confirm that it possesses the claimed properties, such as greater strength or flexibility.

[183] Lemley and Casey, "Remix and Reuse," 1042–1045.
[184] IbÎd.

Similarly, in the food industry, taste testing is a crucial aspect of product development. Currently, even though some advancements like the EMO AI system have been designed to "simulate" taste, it cannot be guaranteed that an AI's assessment of taste matches human sensory experience. Thus, relying solely on AI outputs, without human validation, remains problematic in sectors where subjective human perception is critical. Therefore, depending on the industry, the type and level of evidence required to prove industrial applicability will vary. This variation creates challenges for courts and patent office's when deciding how much proof is necessary to satisfy the utility requirement. If an invention remains purely theoretical or lacks demonstrable real-world application, it is unlikely to meet the standard for industrial applicability.

To illustrate that, policy makers may consider Dr. Toshiko Takenaka's way in considering the standards for industrial applicability. He upholds Japan's policy in deciding the industrial applicability and states that Japan adopts a highly practical approach when evaluating industrial applicability for AI-related inventions. In Japan, it is not enough to provide theoretical or hypothetical usage. Meaning that the innovation must demonstrate real-world execution. For example, if an AI system creates a more efficient robot or machine, then the applicant must show actual usefulness from that robot or machine, such as quicker operation, better accuracy, or enhanced dependability. Meanwhile, clear, quantifiable, and practical advantages are necessary to fulfill Japan's patentability criteria. Further focusing on speculative outputs alone is insufficient.

Thus, the criteria of industrial application play a key part in assessing whether an invention qualifies for patent protection. By that, the requirement of industrial application plays an important role in assessing whether an invention qualifies for patent protection.

Moreover, in traditional discoveries, human inventors can clearly prove practical applicability through trials and real-world testing, but AI-generated outputs usually fail to match these criteria. Particularly in sensitive domains like as medications, materials research, and food technology. Apart from that, each business has its own evidence of proof, safety, or tangible benefit, but AI concepts risk being considered as speculative rather than industrially feasible.

Another key problem is the necessity to identify a clear legal threshold for inventorship. In other words, patents are significant legal rights that have a direct effect on public health, finance, and innovation sectors. So, they must be managed with utmost care and responsibility. Further, an innovation should give a real solution to a technological problem, and simply theoretical constructions without practical utility should not be eligible for patent protection. This is why experts such as Dr. Toshiko Takenaka highlight the need for real-world application, saying that hypothetical or speculative advantages alone are not adequate.

Hence, as AI technologies continue to develop rapidly, the legal systems should focus on a careful balance between encouraging innovation and safeguarding public interest. As Dr Toshiko Takenaka pointed out, there should be clear, practical benefits from the AI-generated invention, especially in the field of medicine or food, where human testing matters. On the other hand, policymakers should set clear rules for AI-generated inventions, especially when it comes to liability and legal duties in cases of negligence or mistakes. Thus, the researcher believes patent law must balance encouraging innovation with keeping clear human inventorship and real-world usefulness.

So, in the next section, the study will try to explore and propose solutions for this problem and focus on the discussion of leading scholars and policymakers, further comparing them with Sri Lanka's current intellectual property framework. In line with that, the study will also analyze how Sri Lankan IP law should develop to address AI-generated inventions and what steps are necessary to prevent future legislative delays in this emerging field.

## 4.3 A COMPARATIVE FRAMEWORK FOR INTEGRATING AI-GENERATED INVENTIONS INTO SRI LANKAN PATENT LAW

Like many other jurisdictions across the world, Sri Lanka also currently does not accept artificial intelligence (AI) as an inventor under its intellectual property laws. That means, the Sri Lankan Intellectual Property Act adopts a traditional approach that requires the inventors should be natural persons. This explains that Sri Lanka's legal system also like the United States, the United Kingdom, and the European Union's legal system, in IP law that only allows people can be called inventors in patent applications. The idea of artificial intelligence being an inventor has regularly been rejected by their courts and patent offices.

A remarkable exception to this trend is South Africa, where the court actually declared inventorship in favor of an AI system (DABUS) because of a "lacuna" in the law and an emphasis on procedural compliance rather than a substantive assessment of who actually created the invention. However, this approach has been heavily criticized by legal scholars and policymakers for its weak legal basis, with calls to restructure and amend the law. Although the case has highlighted the dangers of relying on procedural loopholes, it

has nevertheless opened a new chapter in the debate on whether AI-generated inventions can qualify for inventorship.

The controversial judgment from the South African court has led legal academics all around to question whether, as AI technology develops, there may come a time when AI systems may do all the tasks indistinguishable from those of humans, including inventing, emotional expression, and even assuming legal responsibility. This poses major problems for the future of intellectual property law: if AI were ever to be acknowledged as a legal entity, who would have the right to its inventions? Who would be responsible for abuse or infringement? These issues include Sri Lanka as well, like other countries, because the present Intellectual Property Act is silent on artificial intelligence, therefore highlighting a major hole in the current legal system.

In line with that context, the most important matter to deal with in IP law for Sri Lankan policymakers and legal scholars is to start formulating strategies for regulating AI-generated inventions. There will be some possible reforms, including amending the law to allow human proxies or sponsors to claim inventorship for AI-generated inventions, creating a new category of protection tailored to AI outputs, and participating in international efforts to harmonize standards and practices in this field. If Sri Lanka is not proactive like that, the legal growth of Sri Lanka may risk falling behind in both legal clarity and innovative potential as artificial intelligence continues to transform the environment of creativity and invention. Timely debate and legislative revision are thus required to ensure that the country's intellectual property policy remains relevant and effective in the age of artificial intelligence.

This implies that, the legal ambiguity in Sri Lanka's Intellectual Property Act No. 36 of 2003's patent legislation is still a significant problem in the legislation. That's why scholars and policymakers should answer as soon as feasible. On the other hand, the Act has not been substantially updated since 2003, which controls copyright, patents, industrial designs, and related rights, despite major technical developments. Unlike many other legal professions, this section notably must provide greater attention to it since intellectual property law needs periodic revisions to meet emerging challenges brought by innovations like artificial intelligence (AI), blockchain, and the Internet of Things. In the age of Industry 4.0, Sri Lanka's legal system risks becoming indeterminate, compromising its power to govern emerging technology and protect societal order. Hence, without proactive adjustments, the law may collapse under the weight of technological innovation, generating widespread legal and economic instability.

Therefore, in accordance with global norms and development, Sri Lanka’s intellectual property policy must prioritize legislative revisions as soon as possible. To illustrate that, the Act is absent in several aspects, such as addressing the laws of AI-generated innovations, digital copyright disputes, or blockchain-based IP administration. The revisions should state the AI's involvement in innovation and clarify ownership by giving rights to inventors or users of AI systems, assuming legislators acknowledge AI as an inventor. Furthermore, patentability criteria such as "inventive step" should be amended to account for AI-driven innovation, ensuring assessments reflect modern technological realities while aligning with international frameworks and the World Intellectual Property Organization's (WIPO) guidelines on AI and intellectual property.

Hence, the study suggests the reform in Sri Lanka might follow one of two principal directions: either by introducing a separate, updated statute focusing entirely on patents or by performing extensive revisions to the existing patent provisions under the present Intellectual Property statute. Further, it is natural that Sri Lanka may prefer to continue the conventional approach of recognizing only humans as inventors, but the issue arises as to how long this posture can be held in the face of global progress. Other jurisdictions are already wrestling with the ramifications of AI-generated discoveries, and worldwide conversation is increasingly centered on whether patent rules should be updated to accommodate non-human inventors. If Sri Lanka's legislation remains static while the world continues to evolve, the country risks slipping behind, both in its ability to stimulate domestic innovation and in its capability to regulate and safeguard intellectual property efficiently.

In addition to legal reform, some operational development is also required within Sri Lanka's National Intellectual Property Office (NIPO). According to the details provided by the NIPO call center, only 15 staff members are responsible for a wide range of tasks island-wide; hence, this indicates that NIPO faces systemic issues. Each employee is responsible for reviewing applications, identifying faults, and determining patentability. This overburdened workload of staff in the patent examination procedure may be delayed and lead to errors. Apart from that, that small work group is required to handle patent applications from island-wide, which is an overload considering the expanding number of technical breakthroughs being filed. As a result, the quality and uniformity of patent exams may be impaired.

Therefore, Sri Lanka's IP law must be synced with technological advancements in order to guarantee that the legal system remains relevant and capable of providing justice as per the new updates. A mere revision of substantive patent legislation is not enough; apart from it, boosting institutional capability also should be considered, such as extending the patent examination team at the National Intellectual Property Office (NIPO) and improving the quality of patent evaluations. Ultimately, effective reform—whether through a new Act or major amendments—will be essential for Sri Lanka to keep pace with global trends, protect the interests of inventors, and maintain a just and orderly society in the face of ongoing technological change.

Therefore, if Sri Lanka decides to modernize its Intellectual Property Act to accept AI-generated inventions as an inventor, there should be several important legal and policy challenges that must be addressed to ensure both clarity and accountability. As the study discussed earlier, the United States, the United Kingdom, and the European Union continue to uphold the principle of traditional inventor policy, which is that only human beings can be recognized as inventors. So, amending the law against those major legislations as is not an easy job, but there should be some courage that Sri Lanka's policymakers should take like South Africa’s legal scholars which was discussed in Chapter 2 , because the emergence of AI systems like DABUS, which have autonomously produced patentable inventions, has started a global debate about the adequacy of traditional patent frameworks.[185] Not only that, the rapid development of technological advancement also keeps pushing policymakers to change the law. Hence, in updating its legislation, Sri Lanka

[185] Abbott, *The Reasonable Robot*: 9.

must strike a careful balance between encouraging innovation and preserving essential legal and ethical safeguards.

To make things easier, a sensible approach is recommended by the legal scholars. That is to appoint a person or legal entity, such as a company or a person, to serve as a proxy or sponsor for AI-generated ideas. This individual or company would bear liabilities for the innovation. Further, it would function as the designated inventor for patent purposes. However, this process must be managed with careful monitoring under NIPO's surveillance, as attributing invention to computers might raise substantial ethical questions and potentially diminish the value of human innovation. Therefore, Sri Lanka might establish a specialist review team inside the National Intellectual Property Office (NIPO) to analyze AI-related applications, ensuring that each case is assessed with the required technical and ethical scrutiny.[186]

To further balance innovation with consideration, Sri Lanka may try to adopt modified patent conditions for AI-generated inventions. To illustrate that, Sri Lanka may increase fees, such as application fees, renewal fees, and other fees, compared to those for human-generated inventions. Additionally, the duration of patent protection could be reduced; for example, the standard term of patent protection in Sri Lanka is 20 years from the filing date.[187] So, the period for AI-generated inventions might be reduced to only 10 years, which means half of it. By imposing like that and keeping a balance between AI-generated inventions and human inventions, it would prevent the traditional patent method,

[186] Mahesha Fernando, "Challenges in Patent Examination in Sri Lanka: AI and Emerging Technologies," *Sri Lanka Law Journal* 34, no. 2 (2022): 45–67.
[187]National Intellectual Property Office of Sri Lanka, "Patents," <https://www.nipo.gov.lk/web/index.php?option=com_content&view=article&id=14&Itemid=145&lang=en> (accessed 4 March 2025).

which is a human-made patent. Further, it is fair for a person who spends more time inventing to get benefit from it rather than a mere prompt from a computer.

Apart from that, another method Sri Lanka could also apply is the dual-tiered inventorship model. Currently, natural humans are the only ones who can be recognized as inventors in many jurisdictions, including the United States and the United Kingdom. The main reason is that inventorship entails legal responsibilities, such as the ability to assign rights, enter into contracts, and be held accountable for infringements or misrepresentations. However, the AI system lacks legal personhood and hence cannot perform these functions. For example, in *Thaler v. Vidal*, the court declared that an AI could not be recognized as an inventor under the present US patent rules, but only a person may be an inventor who has the legal capacity. However, the court accepts the partial involvement of AI in the creation of innovation. This indicates the main problem here is the legal threshold, and the law is concerned with who will be responsible in the event of liability and other things.

To explain that, the researcher proposes that policymakers of Sri Lanka may introduce the role of "implementer," who will be the responsible legal figure with all matters regarding AI-generated inventions. The implementer should be a legal entity that has the legal capacity, such as a human or a company. He is the one who should decide all the matters regarding the AI-generated invention, such as determining the patent's commercial value, monitoring its sale or licensing, absorbing legal responsibilities associated with the patent, and ensuring contractual compliance. That means he is the one responsible for all matters regarding patent protection.

Further, this implementer clause should be in AI-generated patents only; the human-made patents should be dealt with traditionally. This distinction allows AI to be recognized for its unique contributions while also ensuring that a responsible party is in charge of the associated legal and commercial responsibilities. Recognizing AI as a creator, with an implementor handling the legal aspects, combines the ethical concerns of human creation with the practical realities of AI's capabilities. It recognizes the importance of AI in innovation while preserving the value of human control and responsibility. This paradigm also aligns with legal experts' proposals for frameworks that acknowledge AI's role in creation while maintaining human accountability.

On the other hand, regarding the non-obviousness assessment for AI-generated inventions, Sri Lanka may impose a dual evaluation verification process. That means, during the non-obviousness test, the traditional method is to examine the innovation by a skilled person in the same field. So, if the law accepts the AI as an inventor, this method could not be enough for the verification because AI can create a replica that a skilled person in the field could not identify. So, there is a possibility he may grant a patent for that. Therefore, the law should introduce AI non-obviousness detection software or a machine that can detect overlaps or obviousness across multiple datasets and information. This may cost a lot, but in the future, if the government is forced to adopt the AI-generated invention due to technological development, then the government may take this as a reference.

# CHAPTER FIVE
# CONCLUSION

## 5.1 CONCLUSION

This study has critically addressed the urgent need for modifications to Sri Lanka's Intellectual Property Act No. 36 of 2003 because of the emerging challenges of AI-generated inventions recently. In line with that, the AI has been used for inventions in two ways, namely AI-assisted (or partial) inventions and AI-generated inventions. The current legal framework does not have any suggestions regarding AI-assisted innovations because the human role is still considered very important to the process of innovation. However, the actual problem comes up when an AI system creates an innovation completely by itself, which means, autonomously, with little or no human involvement, which means ensuring AI-generated invention.

The Sri Lanka Intellectual Property Act 2003 is the main governing body of IP law in Sri Lanka now, but it has only been amended a few times. However, there was no amendment carried out regarding technological advancement or artificial intelligence. That means it hasn't kept up with the fast-paced technology changes that are changing innovation throughout the world. Hence, there is a big gap growing between the IP law of Sri Lanka and the technology development of Sri Lanka. The technology will not wait until the law has been made according to its growth; hence, all the countries around the world are being pushed to amend their IP law in accordance with current developments in technology, especially AI laws.

On the other hand, the United States and the United Kingdom are actively practicing traditional legal frameworks, which means only natural humans can be recognized as inventors. The reason is that their laws do not explicitly identify AI as an inventor, and it cannot hold any inventorship as well. Hence, acknowledging AI as an inventor is not an easy task, but it would need a lot of legal work behind it. The main problem with recognizing AI as an inventor is its lack of legal personhood, which means it does not have liability or accountability for any consequences regarding its innovation. This vacuum in the law creates major debates and concerns among legal scholars, especially regarding the ownership and the legal capacity of artificial intelligence, because the AI is evolving day by day, and the law regarding it is left behind.

As a result, some scholars say the legislation regarding IP should be overlooked and a major amendment should be made that includes AI-generated patents and AI inventorship, while the other party denies this proposal, arguing that if AI were to obtain an inventorship, it would cause a huge problem in society. That means the traditional invention may decrease, leading to concerns that human creativity and ingenuity could be overshadowed by AI-generated innovations. Further, it is not ethical to grant inventorship to an AI because the product was invented by it. A scientist spends most of his time creating an innovation and studying it, but a computer, without any effort, creates an invention. These two are not the same, and it is unethical to consider both in the same category; further, it will cause a negative impact on scientists as it will discourage them from inventing more, and the investors from investing less in human inventions, because it takes time and more money. Hence, AI should not be considered an inventor. Therefore, a middle solution is needed to bridge the gap between AI inventors and human inventors.

Further, the study also discussed the National Intellectual Property Office (NIPO) and what improvements should be made with it. In other words, at present, NIPO manages all intellectual property issues under the Intellectual Property Act No. 36 of 2003, but it does so with a small number of staff, with only 15 members.[188] At the moment, the team at NIPO has to look after patent applications coming in from every corner of Sri Lanka. Later, if there has been an increase in these applications, particularly as more people start inventing, then how can it manage all the applications? Or if the law accepted AI invention, then the NIPO should consider an alternative. Therefore, the best solution for that is forming a specialized group within NIPO to assess the originality and background of AI-related patent applications could greatly improve the accuracy and consistency of their reviews. These changes would help Sri Lanka align its intellectual property practices with global standards, encourage investment, and ensure that the country can keep up with rapid advances in technology.[189]

Therefore, to solve this problem, this study proposes a dual-tiered framework that distinguishes between the "inventor" and the "implementor." In this framework, the AI would be the inventor, which is actually an AI system that comes up with new inventions or ideas on its own, and its creative input would be noted in the patent paperwork. However, since AI cannot hold legal responsibility or liability, the "implementor" would be a human or a legal entity, like an individual inventor, a company, or an organization, who takes care of all the legal, commercial, and ethical duties tied to the patent. This idea aligns with

[188] HG.org, "IP Law in Sri Lanka," <https://www.hg.org/laws/sri-lanka/intellectual-property> (accessed 4 March 2025).
[189] IbÎd.

current international thinking, reflected in the guidelines of major patent office's such as the European Patent Office (EPO) and the United States Patent and Trademark Office (USPTO), which stress the importance of having a natural person or legal body responsible for inventorship or ownership to ensure enforceability and accountability.

To balance between these, the study suggests changing the patent regulations, particularly for AI-generated inventions. One of the best solutions could be listed as increasing the fees for patents and renewals. For example, in Sri Lanka, a standard patent is valid for 20 years, so the law can limit the AI innovation to 10 years, with the option to extend it. Furthermore, the application fee should also be revised and imply more on AI-generated inventions than traditional inventions. By doing that, it would be easier to safeguard human creativity and prevent traditional invention from being manipulated by artificial intelligence.

A significant part of this research is the proposal to improve how non-obviousness is evaluated for AI-generated inventions by introducing a two-step review process. Alongside the usual expert evaluation, AI tools could be used to spot overlaps or obvious developments across different fields. This approach would make patent examinations more accurate and reliable, ensuring AI inventions genuinely meet the standards of novelty and inventiveness.

Finally, by looking at all of these, it is crystal clear that a lot of research regarding this matter should be focused on developing clear legal definitions and frameworks that address the particularities of AI-generated inventions. Apart from that, research also should be conducted on comparative analysis on how other nations are dealing with AI-generated inventions and what progress and development those countries are making and doing.

Furthermore, practical research on how to apply the "implementer" in Sri Lankan IP law if policymakers agree to adopt AI-generated inventions.

In short, the research has started with three objectives that need to be discussed in the study. Thus, it began with examining the legal position of AI-generated inventions in the UK, the US, the EPO, and South Africa. Also, it looked at the legal position that has been practiced in those regions. The US, the UK, and the EPO are relying on the traditional inventors' method, as humans are the only ones who can be identified as inventors. The South African policymakers took another step in the IP world as they allowed the AI to be an inventor. This created a huge argument among IP scholars. Further, the research moved into the IP law of Sri Lanka: the current IP laws in Sri Lanka are governed by the Intellectual Property Act 2003. However, the Act did not go through a lot of major amendments regarding inventorship. Hence, it does not identify or even talk about AI at all in the Act. This leaves the country's legal sector regarding IP behind from the other countries' laws. Hence, there should be an amendment or a new law regarding inventorship in the Intellectual Property Act 2003. As per the third objective, mere amendment in the law is not enough, but there should be a lot of legal discussions regarding it. Hence, the only way to get those discussions is by looking at what the legal scholars' opinions are regarding AI-generated inventions.

In line with that, some scholars suggest that the traditional legal inventors should be protected, as AI cannot be an inventor. On the other hand, some legal opinions say the law should be amended due to technological advancement, and to face the future, a definite law must be legislated. By relying on this, the research suggests the Act, which is the Intellectual Property Act 2003, should be amended and give some opportunity for AI in it,

but not just simply give them a legal status as blind; there should be a proper guideline by which AI could be an inventor, but there should be an implementer as well who can manage all the legal aspects of AI-generated patents. Also, a few amendments should be needed, such as increasing fees, reducing the protection period, and increasing the legal fees for renewal and application. Overall, the research aims to open the door for AI-generated invention and its related matters, hoping for a lot of discussion in this emerging field in the future.

# REFERENCES/ BIBLIOGRAPHY

## a. Books


Abbott, R. (2020). *The reasonable robot: Artificial intelligence and the law.* Cambridge University Press.

Bouchoux, D. E. (2018). *Intellectual property: The law of trademarks, copyrights, patents, and trade secrets.* Delmar Cengage Learning.

Cohen, J. E., & Lemley, M. A. (2001). *Patent scope and innovation in the software industry. California Law Review*, 89, 1.

Correa, C. M. (2020). *Trade-related aspects of intellectual property rights: A commentary on the TRIPS Agreement.* Oxford University Press.

Picard, R. (1997). *Affective computing.* MIT Press.

Adelman, M. J., Rader, R. R., & Thomas, J. R. (2009). *Cases and materials on patent law.* Thomson Reuters.

Hatfield, G. (1996). *The workings of the intellect: Mind and psychology.* IRCS Technical Report No. IRCS-96-05. University of Pennsylvania.


## b. Chapters in Edited Books:


Perera, A. (2024). *Discourses on patent law reforms in Sri Lanka*. In *Dilemmas of intellectual property discourse in Sri Lanka* (pp. 47–111). Springer Nature Singapore.

**c. Monographs**


Bottomley, S. (2014). *Patents and technology.* In *The British patent system during the industrial revolution 1700–1852: From privilege to property* (pp. 175–294). Cambridge University Press.

Hirimuthugodage, D. (2011). *Trade related intellectual property rights (TRIPS) agreement and the agriculture sector in Sri Lanka* (ARTNeT Working Paper Series No. 92). Retrieved from *https://www.econstor.eu/bitstream/10419/278606/1/1855951452.pdf*

Dernis, H., Squicciarini, M., de Pinho, R., & Wanner, I. (2025). *Identifying emerging AI technologies using patent data: A semi-automated approach.* OECD. Retrieved from *https://www.oecd.org/content/dam/oecd/en/publications/reports/2025/09/identifying-emerging-ai-technologies-using-patent-data_5c8da861/d17e9a1a-en.pdf*

Maher, T., & Schaffelke, N. (2023). *Unlocking the AI advantage: Investigating the impact of AI patents on firm earnings and industry dynamics.* Retrieved from *https://www.diva-portal.org/smash/get/diva2:1771192/FULLTEXT01.pdf*

World Intellectual Property Organization. (n.d.). *AI inventions: WIPO conversation on IP and frontier technologies.* Retrieved from *https://www.wipo.int/about-ip/en/frontier_technologies/pdf/wipo-ai-inventions-factsheet.pdf*

**d. Journal Articles**

Baranskaitė, E., & Labanauskaitė, D. (2020). The concept of innovation in the approach to novelty, value creating, interaction processes and social progress. *Regional Formation & Development Studies*, 31(2).

Lemley, M. A. (2004). Property, intellectual property, and free riding. *Texas Law Review*, 83, 1031.

Lemley, M. A. (2004). Ex ante versus ex post justifications for intellectual property. *University of Chicago Law Review*, 129–149.

Mahesha Fernando. (2022). Challenges in patent examination in Sri Lanka: AI and emerging technologies. *Sri Lanka Law Journal*, 34(2), 45–67.

Martinez-Miranda, J., & Aldea, A. (2005). Emotions in human and artificial intelligence. *Computers in Human Behavior*, 21(2), 323–341.

Müller, M. (2024). Issues in patenting "artificial intelligence" from an EPO perspective. *Journal of Intellectual Property Law & Practice*, 19(3), 201–202. Link:

Pagenberg, J. (1991). The WIPO patent harmonization treaty. *AIPLA Quarterly Journal*, 19, 1.

Plomer, A. (2019). The EPO as patent law-maker in Europe. *European Law Journal*, 25(1), 57–74.

Seymore, S. B. (2010). Rethinking novelty in patent law. *Duke Law Journal*, 60, 919.

Tomlinson, B., Black, R. W., Patterson, D. J., & Torrance, A. W. (2024). The carbon emissions of writing and illustrating are lower for AI than for humans. *Scientific Reports*, 14(1), 3732.

**e. Online Articles**


Müller, M. (2024). Issues in patenting "artificial intelligence" from an EPO perspective. *Journal of Intellectual Property Law & Practice*, 19(3), 201–202. Retrieved from https://academic.oup.com/jiplap/article/19/3/201/5867031

Ishola, V. (2024). Leveraging robotics for sustainable agriculture: A comparative analysis of Africa and the EU's food security strategies. *African Journal of Agriculture and Food Science*, 7(4), 317–329. Retrieved from https://doi.org/10.52589/ajafs-3mcayt0d

Llarena, Z. (2023). Shepard's validation of antitrust relief framework on patent infringement of Novartis' cancer drug using genomic architectures of legal literature based on UK intellectual property law. *International Journal of Law and Politics Studies*, 5, 11–17. Retrieved from https://doi.org/10.32996/ijlps.2023.5.5.3

DLA Piper. (2025). AI as inventor: Legal challenges and implications for patent law. Retrieved from https://www.dlapiper.com/en/insights/publications/law-in-tech/ai-as-inventor-legal-challenges-and-implications-for-patent-law

European Patent Office. (2025). Is it patentable? Retrieved from https://www.epo.org/en/new-to-patents/is-it-patentable

HG.org. (2025). IP law in Sri Lanka. Retrieved from https://www.hg.org/laws/sri-lanka/intellectual-property

ICTA Sri Lanka. (2025). Sri Lanka appoints National AI Advisory Committee to drive AI strategy. Retrieved from https://www.icta.lk/sri-lanka-appoints-national-ai-advisory-committee-to-drive-ai-strategy

Kittilä, T.-R. (2022). Novelty: How novelty of an invention is determined? *Laine Intellectual Property*. Retrieved from https://www.laineip.fi/en/novelty-how-novelty-of-an-invention-is-determined/

Lexology. (2024, April 2). Challenges to patenting AI-generated inventions. Retrieved from https://www.lexology.com/library/detail.aspx?g=442443d6-3420-4142-b830-2b01a4e09c95

National Intellectual Property Office of Sri Lanka. (2025). Patents. Retrieved from https://www.nipo.gov.lk/web/index.php?option=com_content&view=article&id=14&Itemid=145&lang=en

South East Asia Journal of Contemporary Business, Economics and Law. (2017). Patenting software-related inventions in Sri Lanka. *SEAJBEL, 12*(2), 71–72. Retrieved from https://seajbel.com/wp-content/uploads/2017/05/BUS-326.pdf

Wickramanayake, K. (2024). Redefining copyright laws: Addressing AI-generated works and authorship rights in Sri Lanka. *Factum Perspectives*. Retrieved from https://factum.lk/tech-cooperation/factum-special-perspective-redefining-

*copyright-laws-addressing-ai-generated-works-and-authorship-rights-in-sri-lanka/*

BitLaw. (2014). Section 101 and artificial intelligence (AI) patents. Retrieved from *https://www.bitlaw.com/ai/section-101-eligibility-for-ai-inventions.html*

Inventa. (n.d.). Artificial intelligence as an inventor: A brief exploration of South African intellectual property law. Retrieved from *https://inventa.com/ip-news-insights/opinion/artificial-intelligence-inventor-brief-exploration-south-african*

Li, F.-F., & Etchemendy, J. (2023). The rise of the machines: John Etchemendy and Fei-Fei Li on our AI future. *Hoover Institution*. Retrieved from *https://www.hoover.org/research/rise-machines-john-etchemendy-and-fei-fei-li-our-ai-future*

Anderson, J., & Rainie, L. (2018). Improvements ahead: How humans and AI might evolve together in the next decade. *Pew Research Center*. Retrieved from *https://www.pewresearch.org/internet/2018/12/10/improvements-ahead-how-humans-and-ai-might-evolve-together-in-the-next-decade/*

Banterle, F. (2018). Ownership of inventions created by artificial intelligence (Paper presented at AIDA 2018). Retrieved from *https://papers.ssrn.com/abstract=3276702*

Bosher, H. P., Westenberger, P., Gurgula, O., & Wang, F. (2020). WIPO impact of artificial intelligence on IP policy: Response from Brunel Law School & Centre for Artificial Intelligence. *World Intellectual Property Organization*. Retrieved from

https://www.wipo.int/documents/d/frontier-technologies/docs-en-artificial-intelligence-call-for-comments-org_brunel.pdf

George, A., & Walsh, T. (2022). Artificial intelligence is breaking patent law. *Nature, 605*(7911), 616–618. Link:

Grand View Research. (2023). Artificial intelligence market size, share | AI industry report, 2025. Retrieved from https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market

Islam, R. (2018). Artificial intelligence and legal challenges. *ELCOP Yearbook of Human Rights 2018*. Retrieved from https://www.academia.edu/38813888/Artificial_Intelligence_and_Legal_Challenges

Kim, D. (2020). 'AI-generated inventions': Time to get the record straight? *GRUR International, 69*(5), 443–456. Link:

Rampal, R. B., & Raghuwanshi, S. S. (2023). Demystifying rights of AI-generated inventions. *LiveLaw*. Retrieved from https://www.livelaw.in/law-firms/law-firm-articles-/ai-generated-inventions-chatgpt-indian-patent-act-dabus-united-states-patent-trademark-office-european-patent-office-226394

Ramalho, A. (2018). Patentability of AI-generated inventions: Is a reform of the patent system needed? *SSRN Working Paper No. 3168703*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3168703

Villasenor, J. (2019). The artificial inventor project. *WIPO Magazine*, (6). Retrieved from https://www.wipo.int/en/web/wipo-magazine/articles/the-artificial-inventor-project-41111

Villasenor, J. (2023). AI inventions: Policy options and a path forward. *Brookings Institution*. Retrieved from https://www.brookings.edu/articles/ai-inventions-policy-options-and-a-path-forward/

White, C., & Matulionyte, R. (2019). Artificial intelligence painting the bigger picture for copyright ownership. *SSRN Working Paper No. 3498673*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3498673

Zameera, F. (2021). Adequacy of intellectual property rights in relation to artificial intelligence: A case study of Sri Lanka. *Academia.edu*. Retrieved from https://www.academia.edu/49252821/Adequacy_of_Intellectual_Property_Rights_in_relation_to_Artificial_Intelligence_A_Case_Study_of_Sri_Lanka

Abdoullaev, A. (2023, November 18). Is AI hardware or software or data models or world models? *LinkedIn*. Retrieved from https://www.linkedin.com/pulse/ai-hardware-software-data-models-world-azamat-abdoullaev-kj2ze/

Cummings, P., Balazer, A., & Worrel, C. (2023, June 14). Who is an inventor? *Bodman PLC News Center*. Retrieved from https://www.bodmanlaw.com/news/who-is-an-inventor/

Karmokar, S. L. (2019). Transformative technologies and social change: An introduction. In *Transformative technologies and social change*. Academic Conferences International Limited. Retrieved from https://openrepository.aut.ac.nz/items/108ec340-e856-4d2e-9c9f-7220493b1b17

Lee, J. Y. (2021). Artificial intelligence cases in China: Feilin v. Baidu and Tencent Shenzhen v. Shanghai Yingxin. *China and WTO Review, 7*(1), 211–222. Retrieved from https://cwto.net/index.php/CWR/article/view/180

**f. Theses/ Dissertation.**

Punchihewa, N. S. (2017). *Intellectual property in tourism and culture in Sri Lanka* (Unpublished master's thesis). Retrieved from https://www.wipo.int/export/sites/www/ip-development/en/agenda/docs/study_ip_in_tourism_and_culture_sri_lanka.pdf

Johansen, E. (2021). *Inventions without inventors* (Bachelor's thesis, Lund University). Retrieved from https://lup.lub.lu.se/luur/download?func=downloadFile&recordOId=9104501&fileOId=9107776

Khachatryan, A. (2024). *The legal challenges of AI-created inventions: Inventorship and ownership issues in intellectual property law* (Bachelor's thesis, Tallinn University of Technology).

**g. Conference Proceedings / Papers**

Vandenhende, K. (2013). The innovation paradox: Starting from what is 'known' to facilitate the discovery of the 'unknown'. In *Proceedings of the 15th International Conference on Engineering and Product Design Education (E&PDE 2013)* (pp. 96–101).

Feldman, R. C., & Thieme, N. (2019). Competition at the dawn of artificial intelligence. In B. Lundqvist & M. Gal (Eds.), *Competition law for the digital economy* (pp. 71–92). Edward Elgar Publishing.

Ehsan, U., Riedl, M. O., Hoffman, R. R., Hornecker, E., Bennett, P., & Mueller, S. (2021). Expanding explainability: Towards social transparency in AI systems. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1–19).

**h. Conference Presented Papers.**

Sharma, G. (2025). *Trademarks and branding in the tech industry*. Retrieved from https://iajesm.in/admin/conference/65a3c764d69c5.pdf

Nanayakkare, B. (2025). *Lesson 12: Intellectual property law*. Retrieved from https://www.academia.edu/21737574/Lesson_12_Intellectual_Property_Law_Intellectual_Property_Law

Mahingoda, C. B. (2023). *Intellectual property rights in the era of artificial intelligence: Navigating the challenges and expanding the boundaries*. In *Proceedings of the SLIIT International Conference on Advancements in Sciences and Humanities* (pp. 206–216). Sri Lanka Institute of Information Technology.

**i. Reports / Institutional & Web Sources:**

Johnson, R. (2017). *Geographical indications (GIs) in US food and agricultural trade* (Congressional Research Service Report No. 21)

Dutfield, G. (2011). *The role of the International Union for the Protection of New Varieties of Plants (UPOV)* (Intellectual Property Issue Paper No. 9).

Lakshman Kadirgamar Institute. (2025). *The Paris Agreement on climate change and Sri Lanka*. Retrieved from https://lki.lk/publication/the-paris-agreement-on-climate-change-and-sri-lanka/

Murugesu, & Neelakandan. (2025). *Intellectual property*. Retrieved from https://www.neelakandan.lk/Compendium%20of%20Law/Intellectual_Property.php

National Intellectual Property Office of Sri Lanka. (2025). *Protection abroad*. Retrieved from https://www.nipo.gov.lk/

National Intellectual Property Office of Sri Lanka. (2025). *History of patent law in Sri Lanka*. Retrieved from https://www.nipo.gov.lk/web/index.php?option=com_content&view=article&id=15&Itemid=146&lang=e

South Centre. (2025). *Neglected dimension of the inventive step as applied to pharmaceutical and biotechnological products: The case of Sri Lanka's patent law*. Retrieved from https://www.econstor.eu/bitstream/10419/278606/1/1855951452.pdf

World Intellectual Property Organization. (2025). *Summary of the Berne Convention for the Protection of Literary and Artistic Works (1886)*. Retrieved from https://www.wipo.int/treaties/en/ip/berne/summary_berne.html

World Intellectual Property Organization. (2025). *WIPO-administered treaties*. Retrieved from https://www.wipo.int/treaties/en/

World Trade Organization. (2025). *Overview: The TRIPS Agreement*. Retrieved from https://www.wto.org/english/tratop_e/trips_e/intel2_e.htm

U.S. Department of Commerce. (2025). *Sri Lanka – Protecting intellectual property*. Retrieved from https://www.trade.gov/country-commercial-guides/sri-lanka-protecting-intellectual-property

InventIP Legal Services LLP. (2023). *Role of patents in promoting innovation and economic growth*. LinkedIn. Retrieved from https://www.linkedin.com/pulse/role-patents-promoting-innovation-economic/

World Intellectual Property Organization. (2019). *WIPO conversation on intellectual property (IP) and artificial intelligence*.

World Intellectual Property Organization. (2023). *Member states*. Retrieved from https://www.wipo.int/members/en/

**j. Edited Reports / Institutional Publications:**

These entries typically include reports or publications that are officially produced by organizations or institutions and may have been edited or compiled by such entities.

Comino, S., Manenti, F. M., & Thumm, N. (2015). *Intellectual property and innovation in information and communication technology (ICT)* (JRC Science for Policy Report No. JRC97541). European Commission.

Hüfner, K. (2010). *UNESCO – United Nations Educational, Scientific and Cultural Organization*. In *A concise encyclopedia of the United Nations* (pp. 715–718). Brill Nijhoff.

Pilch, J. T. (2017). *World Intellectual Property Organization (WIPO)*. In *Encyclopedia of library and information science* (4th ed., pp. 5000–5011). CRC Press.

**k. Multimedia**

News First Sri Lanka. (2025, February 18). *Sri Lanka appoints National AI Advisory Committee to drive AI strategy* [Video]. YouTube. https://www.youtube.com/watch?v=8pRLT9d9JHA