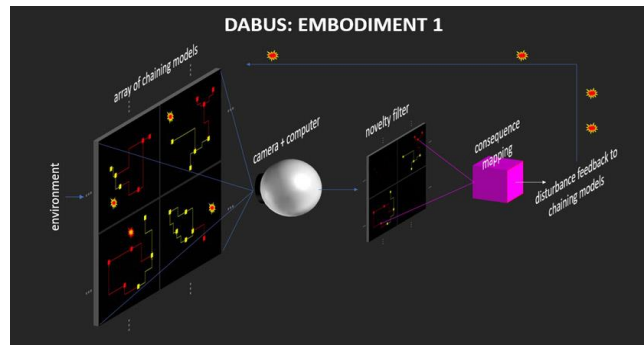


An In-depth Analysis of Inventorship of AI and Turkey's Position

In recent legal debates, the patentability of AI-generated inventions has been contentious. Historically, only humans have been considered inventors, anchored in notions of personhood and intellect. Yet, in a bold move, South Africa and Australia's Federal Court recognized AI, specifically DABUS, as a potential inventor in 2021, defying conventional views. Proponents argue that this accommodates modern innovation trends, while sceptics raise concerns about ownership rights, the potential inundation with trivial patents, and diminished human oversight. With patent laws varying globally, the landscape remains dynamic. As AI's role in R&D grows, more countries are likely to re-evaluate their stances, reshaping the intellectual property (IP) sphere.

Are you surprised by the depth and clarity of that introduction? Here's the twist: an AI tool created that paragraph. Today's AI technology has effortlessly started to undertake roles traditionally held by humans, and yes, that is highly likely to include inventions.

The debate on whether or not an artificial intelligence system can be an inventor began after the development of DABUS, the artificial intelligence system developed by Dr. Stephen Thaler. A team led by Dr. Thales and Prof. Ryan Abbott started filing applications with patent offices worldwide for two separate inventions of DABUS and launched the "Artificial Inventor Project". This project aims to set a precedent on whether artificial intelligence can be considered an inventor¹. It also seeks to encourage dialog about the social, economic, and legal implications of pioneering technologies, such as artificial intelligence, and to guide stakeholders on the protectability of outputs/products produced by artificial intelligence.



To assess these developments and approaches, one must examine the outcomes of the DABUS team's applications to various patent offices worldwide within the scope of this project:

¹ Ryan Abbott, "The Artificial Inventor Project", www.wipo.int, December 2019, https://www.wipo.int/wipo_magazine/en/2019/06/article_0002.html.

In regard to Turkish laws, the Turkish Civil Code (the Code) regulates both natural and legal persons. According to the Code, every individual has the capacity to exercise rights, and all persons are equal in terms of their rights and obligations within the legal system. The Code also regulates the capacity to act, and, accordingly, a person who has the capacity to act can acquire rights and incur debts through their actions. On the other hand, legal entities are subject to all rights and obligations other than those that are inherently related to human beings, such as sex, age, and kinship. Legal entities acquire the capacity to act by having the necessary organs. As for artificial intelligence, it is under debate as to which of these two personality types it falls under or whether it should be considered as a separate type.

Although there is no regulation on artificial intelligence in Turkey as yet, Turkish doctrine considers it possible for artificial intelligence to be considered as a legal person or an “enslaved person” as in Roman law and to be regulated within this scope. Some Turkish scholars argue that AI should be considered a legal person. However, not a natural person but a legal entity such as an association since its relationship is similar to that between an association and its board members.¹⁵

However, according to another perspective, Roman law may offer a solution to AI’s legal personality challenge. This idea suggests that the status of enslaved people in Roman law can be considered and applied as an example of the status of AI in terms of holding economic and IP rights. In Roman law, under the *peculium* system, enslaved persons were able to have limited, yet legal, relations with third parties even though they were considered the “property” of another person.

Similarly to the system of enslavement, there are debates as to whether AI may be able to hold IP rights and, only within a limited scope, be held responsible for the legal consequences of its actions. If this is the case, AI could be designated as an inventor for a certain invention without meaning that AI is a real person or that it holds the rights of an actual person. In this way, the issue of who will own the rights of AI and the matter of responsibility could be solved, at least for the time being.¹⁶

¹⁵ Başak Bak, “Medeni Hukuk Açısından Yapay Zekânın Hukuki Statüsü ve Yapay Zekâ Kullanımından Doğan Hukuki Sorumluluk”, *Türkiye Adalet Akademisi Dergisi*, No. 35, 1 July 2018.

¹⁶ Emine MINDİZ, “Peculium Kurumunun Yapay Zekâyâ Sahip Robotların Hukuki Statülerinin Tespitinde Model Olarak Kullanılması”, *Ankara Üniversitesi Hukuk Fakültesi Dergisi* 71, No. 3, 20 October 2022, <https://doi.org/10.33629/auhfd.1133837>