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Recent Ruling from Tokyo District Court: AI Does Not Qualify as Inventor

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# **Tokyo District Court Addresses AI Inventorship Issue**

The rapid advancement of AI technology has raised a crucial question challenging traditional notions of inventorship: Can AI be an inventor under patent law? On May 16, 2024, the Tokyo District Court addressed this issue, ruling that an "inventor," as defined in the Patent Act, is limited to natural persons and does not include Al.1 This judgment is the first in Japan to address whether an AI system can be recognized as an "inventor" under the Patent Act. The case is related to the well-known DABUS project, which involves patent applications filed in 18 countries and regions<sup>3</sup> for inventions allegedly generated autonomously by an AI system called "Device for Autonomous Bootstrapping of Unified Sentience" (DABUS), developed by Dr. Stephen Thaler.

#### II. **Background**

The plaintiff filed an international patent application under the Patent Cooperation Treaty (PCT) for an invention related to a "food container and devices and methods for attracting enhanced attention." 4 The application claimed priority based on a patent application previously filed with the European Patent Office. Notably, in the national patent application<sup>5</sup> documents, the plaintiff listed "DABUS, the invention was autonomously generated by an artificial intelligence" as the inventor's name.

In response to the plaintiff's application, the Japan Patent Office (JPO) ordered the plaintiff to amend the application to list a natural person's name in the inventor section. However, the plaintiff did not comply with this order, contending that inventions autonomously generated by AI without human intervention should constitute "inventions" under the Patent Act, and the inventor's name is not a mandatory requirement for applications related to such Al-generated inventions. Consequently, on October 13, 2021, the JPO dismissed the application (the "Dismissal").

The plaintiff requested to examine the Dismissal, but the JPO denied the request on October 12, 2022. Dissatisfied with the outcome, the plaintiff escalated the matter by filing a lawsuit with the Tokyo District Court, seeking the revocation of the Dismissal.

Case No. 2023 (Gyo-U) No. 5001. As of June 7, 2024, the Japanese version of the judgment is available on the court's website.

See The Artificial Inventor Project.

According to the official website of The Artificial Inventor Project, patent applications have been filed in South Africa, the United Kingdom, Europe, Germany, Israel, South Korea, Japan, New Zealand, China, the United States, Australia, Canada, Saudi Arabia, Taiwan, Brazil, India, Singapore, and Switzerland as of the present. WO 2020/079499 AI; PCT/IB2019/057809

<sup>&</sup>lt;sup>5</sup> Application No. JP 2020-543051

#### **Court's Decision** III.

In its judgment, the court provided the following reasoning and concluded that "an 'inventor' as defined in the Patent Act is limited to natural persons," ultimately dismissing the plaintiff's claims:

#### 1. Interpretation of the Intellectual Property Basic Act

The court examined the definition of intellectual property under Article 2, Paragraph 1 of the Intellectual Property Basic Act, which defines intellectual property as "property that is produced through creative activities by human beings." On the basis of the literal wording of the article and its legislative history, the court found that Algenerated inventions are not encompassed within this definition.

### 2. Interpretation of the Patent Act

The court found that Article 36, Paragraph 1 of the Patent Act presupposes that the inventor is a natural person. While Item 1 of this paragraph stipulates that the applicant's "Shimei" (i.e., a name for a natural person) or "Meisho" (i.e., a name typically for an entity) must be stated, Item 2, which prescribes the necessary information about the inventor, stipulates that the inventor's "Shimei" must be stated. This difference in the provisions indicates that the Patent Act assumes the inventor to be a natural person. The court acknowledged that the plaintiff's arguments regarding practical concerns related to Al-generated inventions are worthy of attention from a legislative perspective but stated that they fall beyond the scope of interpreting and applying the current Patent Act.

The court also discussed the following points:

#### 3. Inconveniences in interpreting the Patent Act to include AI as an "inventor"

The court highlighted potential issues with recognizing AI as an inventor. Firstly, there is no clear legal basis for determining which party involved in the Al-generated invention should be the inventor, such as the rights holder of the AI, software, or hardware. Secondly, the concept of a "person skilled in the art," which is the standard for assessing inventive step, assumes a natural person, raising questions about the appropriate standard when Al's creative capabilities improve. Thirdly, given the differences in creative capabilities between AI and natural persons, there is room for considering whether the current patent term is suitable for Al-generated inventions based on industrial policy considerations concerning the socioeconomic structural changes brought about by AI.

### 4. Al-generated inventions should be discussed as a legislative matter

The court emphasized that the system design for Al-generated inventions should be left to a democratic process involving national discussions, considering the socioeconomic structural changes brought about by AI. The court suggested that an appropriate solution would be to examine and decide on an ideal framework as a legislative matter considering the harmonization with other Al-related systems systematically and rationally.<sup>6</sup>

#### 5. Plaintiff's Arguments on TRIPS Agreement and EPO's View

The court briefly mentioned that Article 27, Paragraph 1 of the TRIPS Agreement does not oblige member states to include AI in the definition of "inventor" under national patent laws. The court also rejected the plaintiff's argument referencing the European Patent Office (EPO)'s view, noting that while it serves as a reference, it does not directly influence the interpretation of Japan's Patent Act due to the principle of territoriality.

## **Global Trends on AI Inventorship**

Before this court decision, judicial bodies and intellectual property authorities in several countries and regions addressed the issue of whether DABUS can be considered an inventor under their respective patent laws. While a patent was granted for a DABUS application in South Africa,7 which only conducts formality examinations for patent applications, the inventorship eligibility of DABUS has been denied in most countries and regions. In particular, in the United States, the USPTO's decision not to recognize DABUS as an inventor became official when

<sup>&</sup>lt;sup>6</sup> In this regard, it should be noted that this point is also emphasized at the end of the judgment, stating: "In light of the plaintiff's arguments and the overall context of the proceedings, it is particularly expected that Japan first conducts legislative discussions on Al-Generated Inventions and reaches a conclusion as soon as possible, given the importance of Al-Generated Inventions from the perspective of industrial policy.

Application No. ZA2021/03242

the Supreme Court declined to grant certiorari on April 24, 2023.<sup>8</sup> Similarly, in the United Kingdom, the UK Supreme Court dismissed the plaintiff Dr. Stephen Thaler's appeal on December 20, 2023.<sup>9</sup> These judgments held that, based on the interpretation of the patent laws, only natural persons should be considered inventors in patent applications, which is consistent with the present court decision in Japan. In China, an administrative lawsuit challenging the rejection of a DABUS application is pending before the Beijing Intellectual Property Court. <sup>10</sup> However, the "Patent Examination Guidelines" of the China National Intellectual Property Administration, <sup>11</sup> effective January 20, 2024, explicitly states that an inventor must be a natural person and that AI cannot be listed as an inventor. Consequently, the position that AI cannot be considered an inventor in patent applications has become the prevailing view worldwide.

### V. Japan's Stance on AI as Inventors

Concurrently with these global trends, discussions have been held in Japan since around 2017 on whether protection under the Patent Act should be granted to AI-generated inventions and whether AI should be recognized as an inventor. Moreover, on July 30, 2021, the JPO published a general policy regarding the indication of inventors in patent applications. <sup>12</sup> In this general policy, the JPO clarified that the term "Shimei" prescribed in each item of Article 36, Paragraph 1 of the Patent Act refers to the name of a natural person. In contrast, "Meisho" refers to the name of a legal entity. The JPO further clarified that, based on Item 2 of the same paragraph, only natural persons should be listed in the inventor section of a patent application. Therefore, only natural persons may be listed as inventors, not machines, including AI. The JPO's Dismissal in this case was based on this policy, and the court's decision upheld this approach.

A study group established by the Intellectual Property Strategy Headquarters of the Cabinet Office published an interim report on May 29, 2024.<sup>13</sup> The interim report stated that, at present, AI is generally used to support the invention-creation process by natural persons. In such cases, the inventor should be identified as the natural person who creatively contributed to completing the essential features of the invention. On the other hand, the report also suggested that the JPO should continue reviewing the treatment of cases where AI may become capable of autonomously completing the essential features of an invention in the future, considering technological developments, international trends, and user needs. Furthermore, it recommended continuing consideration of the legal capacity of AI itself, such as whether AI can have the right to obtain a patent or be the subject of patent rights.

Although the court's decision is not yet final, based on the above trends, it can be said that in Japan, inventions allegedly made autonomously by AI will not be recognized as having an AI inventor unless new legislative measures are taken.

### VI. Conclusion

The court's decision is significant as it is Japan's first judgment to address whether an AI system can be considered an inventor for inventions created autonomously by AI. The decision is also noteworthy because it aligns with the stance of most judicial bodies and intellectual property authorities in other countries and regions.

In Japan, discussions are ongoing on the treatment of inventions created autonomously by AI and on inventions made by natural persons using AI. The aforementioned interim report indicates that the person recognized as having creatively contributed to the completion of the essential features of the invention should be identified as the inventor. Moving forward, it is anticipated that rules or guidelines will be published to provide specific criteria and factors for determining whether a natural person has creatively contributed to completing the essential features of an invention when using AI. This development would be similar to the "Inventorship Guidance for Al-Assisted Inventions" <sup>14</sup> published by the USPTO on February 13, 2024. Such guidance would offer clarity and

<sup>8 &</sup>lt;u>https://www.supremecourt.gov/orders/courtorders/042423zor\_1p24.pdf</u>

<sup>9</sup> https://www.supremecourt.uk/cases/docs/uksc-2021-0201-judgment.pdf

<sup>&</sup>lt;sup>10</sup> (2024) Jing 73 Xing Chu No. 6353

https://www.wipo.int/wipolex/en/text/589764

https://www.ipo.go.jp/system/process/shutugan/hatsumei.html https://www.kantei.go.jp/jp/singi/titeki2/chitekizaisan2024/0528

<sup>14</sup> https://www.federalregister.gov/documents/2024/02/13/2024-02623/inventorship-guidance-for-ai-assisted-inventions

consistency in determining inventorship for Al-assisted inventions.

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