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## EPO Legal Board of Appeal Decision J0008/20

**Application No 18275163.6  
(Publication EP-A-3,564,244)  
Stephen L Thaler  
(The DABUS case)**

### COMMENTARY ON THE POINTS MADE BY THE LEGAL BOARD OF APPEAL

#### ABSTRACT

On 6 July 2022 the EPO Legal Board of Appeal published its reasoned decision explaining why it refused Dr Thaler's appeal at the end of the oral proceedings held on 21 December 2021.

While the decision rejected Dr Thaler's appeal, the decision accepted some of the fundamental legal points raised and establishes very important principles in law in relation to the patentability of inventions created by AI systems, that is AI-generated inventions. The Legal Board of Appeal even suggests how an applicant can obtain a European patent for AI-generated inventions. Some of those findings are applicable, for reasons I set out below, to other jurisdictions and arguably to the laws of most countries in the world.

I do not agree with some of the reasoning of the Legal Board of Appeal and explain why below. However, as there are numerous appeals currently pending in other jurisdictions, I am deliberately not addressing a number of issues pertaining to these cases, including for instance the question of Dr Thaler's entitlement to the DABUS inventions. I therefore restrict my comments to the relationship between the law as set out in the European Patent Convention and the laws of the contracting States.

In summary:

1) The Legal Board of Appeal held that Article 52(1) EPC is not limited to human-made inventions. How an invention is made apparently plays no role in the European patent system, and it is therefore arguable that AI-generated inventions are patentable under Article 52. [paragraph 4.6.2]

2) The issue with AI-generated inventions does not lie in a substantive condition for patentability but in only a formal requirement, which the Board held requires an applicant to name a human inventor. [paragraph 4.6.3]

3) It would be disproportionate to deny protection to patentable subject matter for failing to fulfil such a formal requirement. [paragraph 4.6.3]

4) The requirement to name a human inventor can be overcome by naming, for example, the owner of the AI system even if the invention was made autonomously by the AI system, that is the owner did not make any inventive contribution and makes a statement to this effect in the application. [paragraph 4.6.6]

## **The Issues on Appeal**

### **The Appellant's Requests**

In brief, Dr Thaler's requests in the EPO appeal proceedings and upon which the Legal Board of Appeal based its decision were:

1) Main Request: that the EPO accept a designation of inventor designating DABUS, an AI system, as the inventor and indicating that Dr Thaler was entitled to the grant of a European patent by virtue of being DABUS's owner. In fact, Dr Thaler designed, built, owns and operates DABUS.

2) Auxiliary Request: that the EPO accept a replacement designation of inventor in which Dr Thaler identified no person or persons whom he believes to be an inventor as the invention was conceived autonomously by DABUS. In this request, Dr Thaler also reasserted his the right to the European patent by virtue of being the owner and creator of DABUS, in line with the Main Request.

Both Requests were accompanied by an Addendum explaining how DABUS arrived at the invention and why Dr Thaler could not consider himself to be an or the inventor, and explaining why he believed he is entitled to the rights in the DABUS inventions.

The question of whether or not DABUS in fact created the inventions autonomously, or even whether an AI system can in fact generate patentable inventions without human input, the subject of much debate elsewhere, was not an issue in these proceedings as the EPO has accepted Dr Thaler's statement and explanation with regard to DABUS having created the inventions. This finding is consistent with that of many other Patent Offices and courts hearing the DABUS cases, including for example in the United Kingdom.

It is worth pointing out that an applicant is not going to seek to designate an AI as inventor for the sake of it. If there is a person who can be designated as inventor, for all the reasons set out in the debates on this issue, one can expect that the applicant will do so. It is only in the case where an applicant truly cannot identify an inventive contribution

from a human being that an applicant is likely to need to designate an AI system as inventor. It should not be ignored that most applicants look beyond their own State for patent protection and to jurisdictions where one must be absolutely truthful in designating the actual deviser of the invention, such as the United States where it is an offence knowingly to name as an inventor someone the applicant knows is not an actual deviser of the invention (18 U.S.C. § 1001).

The philosophical question whether an AI system is capable of creating inventions without human involvement, that is can autonomously create patentable inventions, is therefore not an issue in this case, although I do intend to write about it in due course, particularly in relation to the UK government's 28 June 2022 report on the Outcome to the Open Consultation "Artificial Intelligence and Intellectual Property: copyright and patents" of 29 October 2021.

### **The Legal Board of Appeal Decision**

The Legal Board of Appeal rejected Dr Thaler's Requests on the following grounds (summarised):

1) Main Request: the designation of inventor failed to comply with Article 81 EPC, first and second sentences, because a machine is not an inventor within the meaning of the EPC, and that additionally and in light of Article 81 EPC, the applicant had failed to meet the requirements of Article 60(1) EPC; [by way of explanation, the first sentence of Article 81 EPC requires the applicant to designate the inventor; while the second sentence requires the applicant to provide a statement indicating the origin of the right to the European patent.]

2) Auxiliary Request: The Legal Board of Appeal agreed that this Request rendered inapplicable the first sentence of Article 81 EPC. However, the Board of Appeal held that the Request did not satisfy the second sentence of Article 81, which remains applicable as it brings into the ambit of Article 81 the provisions of Article 60(1) EPC, which sets out how the right to a European patent is determined. DABUS, being a machine, could not own the rights to the invention, so could not be the applicant nor could it transfer the rights to Dr Thaler. DABUS was also not an employee. The Legal Board of Appeal held that national laws relating to entitlement do not override Article 60(1) EPC.

Despite the fact that the both Requests were rejected, the Legal Board of Appeal accepted a number of fundamental points of law argued in the appeal and issued a positive ruling on the patentability of AI-generated inventions.

## AI-Generated Inventions are Patentable

There has been some debate that suggests that only inventions created by natural persons, that is humans, are patentable. That is not in any way a generally held view, as in fact demonstrated by the decisions relating to the DABUS applications.

The Legal Board of Appeal has not only confirmed this but has gone even further, particularly at paragraph 4.6.2 of its decision [relevant passages highlighted].

**“4.6.2 Firstly, under Article 52(1) EPC any invention which is novel, industrially applicable and involves an inventive step is patentable. The appellant has argued that the scope of this provision is not limited to human-made inventions. The Board agrees. How the invention was made apparently plays no role in the European patent system.** This is true even for the morality clause of Article 53(a) EPC: an invention is excluded where its future exploitation would be offensive. Whether its making, namely "the inventor's activities during making or development of his invention" might be regarded as contrary to "ordre public" or morality, is irrelevant for the plain letter of Article 53(a) EPC (see T 0866/01, Reasons, point 5.6; T 315/03, Reasons, point 4.2). **Therefore, it is arguable that AI-generated inventions too are patentable under Article 52(1) EPC.** If national courts were to follow this interpretation, the scope of Article 52(1) EPC and Article 60(1) EPC would not be coextensive: there would be inventions patentable under Article 52(1) EPC, for which no right to a patent is provided under Article 60(1) EPC.”

In my view, Article 52 EPC goes further than this explanation by the Legal Board of Appeal:

**Article 52 (1) EPC** [relevant text highlighted]:

“European patents **shall be granted** for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application.”

The instruction “shall” in Article 52 EPC sets a mandatory requirement that a patent is to be granted for inventions meeting the stated conditions.

Consistent with the decision of the Legal Board of Appeal, inventions made by AI systems that meet the patentability criteria are not only patentable but there is no provision in the EPC that prohibits a patent being granted for those inventions. The Legal Board of Appeal has suggested in its decision how an applicant can obtain a patent for AI-generated inventions, and I discuss the Legal Board of Appeal’s suggestion below.

This finding of the Legal Board of Appeal is, I suggest, of huge importance beyond the EPC and EPO. In fact, it arguably applies to all major industrialised countries for the following reasons.

While the EPC is in some (although not all) regards a stand-alone law, it has very close links to internationally accepted and agreed legal principles and treaties that affect national laws.

The wording of Article 52 EPC has a direct association with, for example:

1) The Convention on the Unification of Certain Points of Substantive Law on Patents for Invention Strasbourg, 27.XI.1963 [The 1963 Strasbourg Agreement]

#### **Article 1**

In the Contracting States, **patents shall be granted** for any inventions which are susceptible of industrial application, which are new and which involve an inventive step.” [emphasis added]

2) Article 27 of TRIPS (The Agreement on Trade-Related Aspects of Intellectual Property Rights), specifically paragraph 1:

“1. Subject to the provisions of paragraphs 2 and 3, patents **shall be available** for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. ” [Emphasis added]

3) The provisions of the Paris Convention and the Patent Cooperation Treaty, which provide for correspondence at the national level for patent applications filed and prosecuted in accordance with their respective provisions.

As a consequence, the provisions of the EPC, that is Article 52 and its associated Articles relating to patentability, have a direct analogy with international agreements and as a consequence the national laws of all the member States to those agreements. The finding of the Legal Board of Appeal, that in relation to Article 52 EPC:

“The appellant has argued that the scope of this provision is not limited to human-made inventions. The Board agrees. How the invention was made apparently plays no role in the European patent system.

...

Therefore, it is arguable that AI-generated inventions too are patentable under Article 52(1) EPC”

therefore ought to be given all the due weight it deserves not only with regard to matters before the EPO but in the national and regional laws of member States of TRIPS, the Strasbourg agreement, as well as of the Paris Convention and the PCT.

It is worth pointing out that this finding of the Legal Board of Appeal is also consistent with the *Travaux Préparatoires*, at BR/169 e/72 ett/AV/prk, at pages 16 and 17:

“[The previous] proposals were not supported by other organisations (ICC, CEIF, CNIPA, COPRICE and UNICE) which, generally speaking, considered that it would not be desirable to make the mention of the

inventor a substantial condition for the grant of patents, since no such condition was laid down in the Strasbourg Convention.”

In accordance with the ruling of the Legal Board of Appeal, *there is no prohibition in law that prevents patents from being granted for inventions generated by AI-systems*. I would go further than that on the basis of the ruling of the Legal Board of Appeal, that according to the EPC (and many other national laws) patents for AI generated inventions are to be (“shall be”) granted.

The only question is how those inventions can be patented, which as the Legal Board of Appeal confirmed, is not a matter of substantive law but a *formal requirement* [paragraph 4.6.3 of its decision]. In fact, the Legal Board of Appeal goes even further than this, in its statement [again at paragraph 4.6.3]:

“It would be disproportionate to deny protection to patentable subject-matter for failing to fulfil such a formal requirement. This is because of the limited additional utility which this statement may have for the public or the individual parties and in view of the absence of a full examination on the actual merits by the EPO.”

### **Article 60 EPC as a Stand-Alone Provision on Entitlement to a European Patent**

The Legal Board of Appeal held that entitlement to a European patent is determined solely on the basis of Article 60(1) EPC, which according to the Board is a stand-alone provision of the EPC (paragraph 4.2.2).

The Board did not address, in this regard, the provisions of Article 60(3) EPC, by which the EPO does not have the power to examine an applicant’s right to entitlement of the patent. In fact, Article 60(3) goes further than this, in stating that in proceedings before the EPO the applicant *shall be deemed to be entitled* to exercise the right to a European patent. In other words, paragraph 3 of Article 60 not only denies the EPO any and all jurisdiction to question the applicant’s entitlement, it positively instructs the EPO to accept it.

The mechanism the Legal Board of Appeal relied upon was Article 81 EPC, which deals with the requirements of the designation of inventor:

[paragraph 4.2.1, last sub-paragraph]

“Article 81, second sentence, EPC does not require a generic explanation as to why an applicant, who is not the inventor, is entitled to file a European patent application. The provision is more specific: it refers to the "origin of the right to the European patent". **In this way, by its very wording, Article 81 EPC establishes a link to Article 60 EPC, where**

**the right to a European patent is mentioned and provided for.”**

*[emphasis added]*

The rationale was that while the EPO is not authorised, even permitted, to examine the veracity of an applicant’s statement of entitlement, it can and should look for compliance with the two mechanisms for entitlement provided for in Article 60 EPC to an applicant who is not the inventor, that is by succession in title or employment. Since DABUS has no legal personality, it could not own the rights to the invention in the first place and could not be employed. See the last sub-paragraph of paragraph 4.2.2 of the decision:

“In view of the normative link between Article 60(1) and Article 81 EPC, not just any declaration, irrespective of its content, can be considered to comply with the EPC. It must be one which identifies the origin of the right in a manner consistent with Article 60(1) EPC. This is the case where the declaration identifies the applicant as the employer or the successor in title of the inventor.”

It is on this basis that the Legal Board of Appeal found that Dr Thaler had failed to comply with the requirements of Article 81.

As the question of entitlement is an ongoing issue in the pending DABUS cases in other jurisdictions, I do not intend in this report to comment upon the merits of this aspect of the Legal Board of Appeal’s decision. I also do not intend to discuss the provisions of Rule 19 EPC, in particular the effect of paragraph 2.

What I would like to focus on is whether Article 60 EPC is in fact a stand-alone provision separate and distinct from other laws, in particular, but not exclusively the laws of the contracting States to the EPC.

I suggest that in the decision itself the Legal Board of Appeal acknowledges the reach of national laws into the provisions of the EPC particularly with regard to entitlement and Article 60(1) EPC.

The tension between Article 60(1) EPC and national laws appears to be acknowledged at paragraph 4.2.2, sub-paragraph 5 (at page 18), of the decision, namely:

“Both the concepts of inventor and successor in title are notions of the EPC; they must be interpreted uniformly and autonomously. While the concept of inventor does not require any support from domestic legislation, **the concept of successor in title implies an interaction with national law. Indeed, the EPC has not established a comprehensive, self-sufficient legal order and private law.** This does not mean that Article 60(1) EPC constitutes a pure reference to national legislation devoid of any content. "Successor in title" has an ordinary meaning under Article 31(1) of the Vienna Convention on the Law of Treaties (1969) ("VCLT"): it refers to a situation where a pre-existing right goes from one subject (the legal predecessor; see also Article 55(1)(a) EPC) into the sphere of another (the legal successor, Article 60(1) EPC). **National law governs the question of whether the transfer is valid or has occurred by operation of a contract,**

**inheritance or other rules of law.** Since the EPC is silent on the matter with the exception of employment relationships, a national court seized with the issue will identify the applicable rules according to their domestic conflict of laws-provisions (van Empel, *The Granting of European Patents*, Leiden 1975, 81; Ubertazzi, *Profili soggettivi del brevetto*, Milano 1985, 281; Cronauer, *Das Recht auf das Europäische Patent*, 1988, Köln et al, 105).”

Even so, the Legal Board of Appeal held (paragraph 4.2.2, sub-paragraph 6 (at page 19):

“However, when national courts decide on entitlement under the Protocol on Jurisdiction and the Recognition of Decisions in respect of the Right to the Grant of a European Patent, **they must apply Article 60(1) EPC and not the provisions governing entitlement to national patents. Therefore, even if, e.g., UK or Australian law provided for other forms of acquiring originally or deriving the right to the patent (such as possession) and these forms went beyond the scope of Article 60(1) EPC, as suggested by the appellant, these rules would apply to domestic applications, but not to European patents, the right to which is attributed to the subjects listed in Article 60(1) EPC and no one else.**”

Article 60(1) EPC cannot, however, be considered in isolation. It is neither a singular provision relating to entitlement nor does it specify any limitation to the ways in which an applicant may be entitled to the rights to an invention (the clause does not stipulate, for example, “only” or “and no more”).

Article 74 EPC provides:

“Unless this Convention provides otherwise, **the European patent application as an object of property shall, in each designated Contracting State and with effect for such State, be subject to the law applicable in that State to national patent applications.**”

*[emphasis added]*

The Legal Board of Appeal did not discuss the interaction between Article 60(1) EPC and Article 74 EPC. I suggest that if a national law of a Contracting State provides other ways in law of determining entitlement to a European patent application as an object of property, Article 74 prevails. For national law to be inconsistent with Article 60(1) EPC, as I suggest above, Article 60(1) would have had to stipulate that the listed indications of entitlement are the only ones permissible under the EPC. Article 60(1) is not explicitly a closed list.

Furthermore, the EPC is bound by the provisions of Article 64, which state:

“1) A European patent shall, subject to the provisions of paragraph 2, confer on its proprietor from the date on which the mention of its grant is published in the European Patent Bulletin, in each Contracting State in



respect of which it is granted, the same rights as would be conferred by a national patent granted in that State.”

There is, I suggest, a possible conflict also between Article 60(1) EPC and Article 64 EPC. Article 64 EPC is one of the Articles of the EPC that integrates European patents into the national laws of the contracting States and requires a European patent to have the same rights as a national patent. That is consistent, of course, with the principle that a European patent on grant becomes a “bundle” of equivalent national patents in the Contracting States.

Article 64(1) is a mandatory provision of the EPC, and provides that the proprietor shall have the same rights as would be conferred by a national patent granted in that State. Therefore, a proprietor having a particular right to entitlement of a national patent under the laws of that contracting State, surely must have the same rights for a European patent, because otherwise there would be a conflict with Article 64 EPC. The Legal Board of Appeal has specifically referred to the United Kingdom Court of Appeal judgment on the Stephen Thaler applications and held that the ruling “concerns domestic provisions which govern national applications, and not Article 60 EPC” [paragraph 4.3.4], which seems at odds with Article 64 EPC.

Any provision of the EPC which diminishes the rights of a proprietor compared to the rights the proprietor would have for an equivalent patent in national law would be in breach of Article 64 EPC.

In addition to the provisions of the EPC, it is necessary to consider the provisions of national law to the extent that they affect European patents and patent applications. For example, Section 77 of the UK Patents Act 1977 states:

**“Effect of European patent (UK)**

(1) Subject to the provisions of this Act, a **European patent (UK) shall, as from the publication of the mention of its grant in the European Patent Bulletin, be treated for the purposes of Parts I and III of this Act as if it were a patent under this Act granted in pursuance of an application made under this Act and as if notice of the grant of the patent had, on the date of that publication, been published under section 24 above in the journal; and—**

**(a) the proprietor of a European patent (UK) shall accordingly as respects the United Kingdom have the same rights and remedies, subject to the same conditions, as the proprietor of a patent under this Act;**

**(b) references in Parts I and III of this Act to a patent shall be construed accordingly; and**

(2) Subsection (1) above shall not affect the operation in relation to a European patent(UK) of any provisions of the European Patent Convention relating to the amendment or revocation of such a patent **in proceedings before the European Patent Office** [i.e. not effective in respect of proceedings in the United Kingdom.]”

For the record, Part I of the Patents Act 1977 comprises sections 1 to 76, including all the Sections relating to the inventor, the applicant’s entitlement and revocation.

I suggest that Article 60(1) EPC is not a stand-alone provision in some way separate or divorced from national laws. If it is, then the EPC is in conflict with national laws.

### **Does the EPC Require the Designated Inventor to be a Person with Legal Capacity?**

At paragraph 4.3.1 of the decision, the Legal Board of Appeal held that:

“Under the EPC the designated inventor has to be a person with legal capacity.”

At paragraph 4.3.2, the Legal Board of Appeal stated that:

“Article 60(1) EPC vests the rights to the European patent in the inventor; thus, it **postulates a person with legal capacity.**”

There is a significant and material difference between these two statements and in my view only the second is the correct one.

At paragraph 4.2.3, the Legal Board of Appeal correctly rules that:

**“The EPO must only examine whether the statement filed under Article 81, second sentence, EPC, assuming that it is correct, refers to a situation encompassed by Article 60(1) EPC. ... The examination is only a formal assessment: it does not require the EPO to identify any applicable law, assess evidence, or examine whether a designation is accurate or true entitlement exists.”**

A statement that the designated inventor *has to be* a person with legal capacity is not, in my view, consistent with the EPC. At best, it is a statement of wish as to what the law ought to require, but it does not. The reason why it is not, I suggest, is that any requirement that the inventor “has to be a person with legal capacity” by necessity must allow for an examination of the designation of the inventor, which the EPC specifically does not permit the EPO to do, as the Legal Board of Appeal correctly holds. (Article 60(3) EPC: “In proceedings before the European Patent Office, the applicant shall be deemed to be entitled to exercise the right to a European patent”; Rule 19(2) EPC: “The European Patent Office shall not verify the accuracy of the designation of the inventor”.)

This leads to a number of possible scenarios, including the following:

- 1) the applicant can name a person who is not an inventor, and can even do so knowingly;
- 2) the applicant can name an entirely fictional character, that is a non-existent person, as inventor.

### Scenario 1

Of course, a named person who is not an inventor should not have any rights as an inventor under the EPC (although arguably does under Rule 21 EPC) and the applicant cannot therefore derive any rights under the provisions of Article 60(1) EPC. Yet, the designation of inventor is acceptable and there is no sanction on the applicant (save for revocation under the limited provisions of the national laws).

### Scenario 2

Similarly, a fictional character, assuming that character has a plausible “real” name, will also pass the cursory test of Article 81 and Rule 19. However, in this plausible scenario, no person at all is designated and there is no way the applicant can derive any rights from that non-existent person. However, yet again the designation of inventor is acceptable and there is no sanction on the applicant (save for revocation under the limited provisions of the national laws). In fact, this scenario is materially worse than one in which the applicant designates the actual deviser of the invention, an AI system in the case of the Dr Thaler applications, and where the applicant has a better claim to entitlement than from a non-existent, fictional, person.

At best, therefore, the EPC and Implementing Regulations could be said to provide that an applicant designate a supposed person as the inventor, and a supposed indication of entitlement. These are provisions with no teeth, that is no sanction against an applicant who files a defective, even intentionally defective, designation.

Indeed, it could be considered curious that procedural legal provisions which in practice permit the above scenarios to apply, and they must in light of the restrictions imposed on the EPO, could on the other hand impose a prohibition on identifying the actual creator of the invention.

In terms of substantive law, if the EPO has no power under the EPC to question the designation of inventor, leaving it instead to contracting states, then the same ought be true of a designation of an AI inventor. Considering a situation in which a contracting State decides under national laws to recognise AI inventors, in that situation the only appropriate course of action would be for the EPO to let the Article 81 declaration go through and then leave it up to national Courts to determine the outcome in each designated State.

## **The Legal Board of Appeal's Suggestions on how to Meet the Procedural Provisions of the EPC for Inventions created by AI Systems**

Having ruled that there is no prohibition to the granting of patents for invention created by AI systems, the Legal Board of Appeal proceeded to suggest a route for apparently satisfying the provisions of Article 81 EPC. The basis of the Legal Board of Appeal's suggestion can be found in the following passages:

[Paragraph 4.2.3]

**“Finally, the EPC contains no rules which the EPO could apply in assessing whether or not the statement required by Article 81, second sentence, EPC, plausibly explains the origin of the right to the European patent.** In view of this background, it is arguable - and it has been argued by the appellant - that the EPO should not and cannot examine the designation of the inventor, including the statement on the origin of the right to the patent. The Board disagrees with this contention.

...

**The EPO must only examine whether the statement filed under Article 81, second sentence, EPC, assuming that it is correct, refers to a situation encompassed by Article 60(1) EPC. It does not need to assess whether, according to the relevant law, the applicant was de jure entitled to file the application, or if the relevant transaction or relationship was valid and really occurred. The examination is only a formal assessment: it does not require the EPO to identify any applicable law, assess evidence, or examine whether a designation is accurate or true entitlement exists. For this reason, the Board deems such an examination to be consistent with the principles set out in Article 60(3) EPC and Rule 19(2) EPC.”**

[Paragraph 4.6.3]

**“Secondly, filing a statement on the origin of the right to the European patent is a requirement under the EPC where inventor and applicant differ. It is only a formal requirement. Its function can reasonably be seen only as informing the public on the possible origin of the right, so that determined third parties, who may be entitled to the subject-matter disclosed in the application, can react and start proceedings in national courts (see also the observations made in the ruling Nippon Piston Ring Co's Application [1987] RPC 120, 131, to which the judgement of the UK Court of Appeal submitted by the appellant refers). It would be disproportionate to deny protection to patentable subject-matter for failing to fulfil such a formal requirement. This is because of the limited additional utility which this statement may have for the public or the individual parties and in view of the absence of a full examination on the actual merits by the EPO.”**

The Legal Board of Appeal then holds, at paragraph 4.6.6:

**“The Board is not aware of any case law which would prevent the user or the owner of a device involved in an inventive activity to designate himself as inventor under European patent law. The EPC, in turn, does not prevent the applicant from providing information in the application which is not relevant for carrying out the invention but may satisfy the fairness concerns identified by the appellant in the addendum of 24 July 2019 (see above, Facts and Submissions, XIV). Secondly, it is the task of the lawmakers to amend the EPC and to assess whether a real problem exists. Different solutions may be conceivable to the issue raised by the appellant. It is not for the Board to select one of the possible approaches.”**

In other words, the decision suggests that an applicant can meet the provisions of Article 81 by naming a person as the inventor and simultaneously providing a statement that the person did not in fact make the invention (is not an inventor) because the invention was created by an AI system. That is in accordance with the Addendum Dr Thaler filed with the Designation of Inventor form, and also reflects the amendment to the description which Dr Thaler made in the Auxiliary Request, as indicated by the Legal Board of Appeal.

The Legal Board of Appeal did not elucidate how such a designation of inventor and accompanying statement could be said to satisfy either Article 60 or Rule 19, save for the reference above in relation to the powers of the EPO under Article 81 [paragraph 4.2.3 of the decision].

I assume that what the Legal Board of Appeal was referring to are the following provisions:

**“Article 60  
Right to a European patent**

...

(3) In proceedings before the European Patent Office, the applicant shall be deemed to be entitled to exercise the right to a European patent.”

**“Rule 19  
Designation of the inventor**

...

(2) The European Patent Office shall not verify the accuracy of the designation of the inventor.”

It would seem that the Legal Board of Appeal has held that these provisions of the EPC would mean that even if an applicant files simultaneously with the designation of “a human” inventor a statement (whether in an Addendum or other annex, or in the patent specification) to the effect that the designated person is not actually an inventor because the invention was created by an AI system, the EPC would not permit the EPO to challenge the designation of inventor. It is possible that the above provisions are deemed

binding because neither an addendum nor the patent specification constitute the “designation of the inventor”. In other words, the EPO would have to stop any examination of the designation of inventor at the point of the form and is not permitted to assess the effect of any further statement made by the applicant.

This seems to be supported by the statement of the Legal Board of Appeal towards the end of paragraph 4.6.6 [highlighted]:

**“The Board is not aware of any case law which would prevent the user or the owner of a device involved in an inventive activity to designate himself as inventor under European patent law. The EPC, in turn, does not prevent the applicant from providing information in the application which is not relevant for carrying out the invention but may satisfy the fairness concerns identified by the appellant in the addendum of 24 July 2019 (see above, Facts and Submissions, XIV). Secondly, it is the task of the lawmakers to amend the EPC and to assess whether a real problem exists. Different solutions may be conceivable to the issue raised by the appellant. It is not for the Board to select one of the possible approaches.”**

While this approach may overcome the procedural requirements of the EPC, in my view it falls short of meeting the intention of the law, that is that the *inventor* must be identified. While this would be done in the Addendum or the patent specification, it would still designate a non-inventor simply to be deemed to have met the procedural requirements of the EPC. (Incidentally, as explained above, by this route an applicant could also indicate a fictional person as inventor.)

## Conclusion

The Legal Board of Appeal has confirmed that there is no prohibition in law to the grant of a patent for inventions made by AI systems. The Legal Board of Appeal goes further, in charting a path that addresses the wording and explicit provisions of the EPC relating to the naming of an inventor while still providing for the applicant and designated inventor to be honest as to the true creator of the invention.

Some aspects of the decision of the Legal Board of Appeal ought, I submit, to be applied universally in light of the harmonisation of fundamental principles for patentability. Others, particularly the manner in which the Legal Board of Appeal suggests addressing the issue of the designation of inventor, are dependant on local patent laws and should not be viewed solely in light of the EPC. For instance, while the Legal Board of Appeal does not see a problem with an applicant designating the user or owner of the AI device as the alleged inventor (and as we have seen the EPC does not provide any mechanism to deny such a designation of inventor) doing so can have significant ramifications in national law, for instance in relation to employee inventor rights (such as the right to compensation). Similarly, while this approach may not be incompatible with

the EPC, it is incompatible with national laws which restrict inventorship to the actual inventor(s), such as in the United States where it is an offence wilfully to name a non-inventor in the Declaration.

If the route proposed by the Legal Board of Appeal is followed, and there is no reason why it cannot be until, as the Legal Board of Appeal has indicated, the lawmakers amend the EPC, I suggest it is *essential* that an applicant include an explanation in the specification or an Addendum to the designation of inventor setting out that the designated inventor did not actually make the invention as the invention was created by an AI system. In addition to ensuring honesty towards the EPO and the public, this ought to help ensure that the designated “non-”inventor does not obtain rights to which they are not truly entitled.

Whether this route is compatible with all national patent laws, is a matter for further examination. For example, what effect a simultaneously filed statement (for instance in the form of the Addendum Dr Thaler filed at the EPO) explaining that the named inventor is not actually the true deviser of the invention, because the invention was created by an AI system, would have in overcoming the provisions of 18 U.S.C. § 1001, is not a matter I am qualified to have an opinion on, but seems an interesting thought.

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