FEDERAL COURT OF JUSTICE

DECISION

X ZB 5/22

from the

June 11, 2024

in the appeal proceedings concerning patent application 10 2019 128 120.2

Participants:

President of the German Patent and Trade Mark Office, Zweibrückenstraße 12, Munich,

Appellant and respondent to the cross-appeal,

- authorized representative: Attorney Prof. Dr. Rohnke -

vs.

Dr. phil. Stephen L. Thaler, 1767 Waterfall Drive, St. Charles, Missouri (United States of America),

Applicant, respondent and cross-appellant

- authorized representative: Lawyer Rinkler -

Reference book: yes

BGHZ: yes

BGHR: yes

JNEU: no

DABUS

PatG § 37 para. 1, §§ 6, 42

a) Only a natural person can be an inventor within the meaning of Section 37 (1) PatG. A machine system consisting of hardware or software cannot be designated as an inventor even if it has artificial intelligence functions.

b) The designation of a natural person as inventor is also possible and necessary if a system with artificial intelligence has been used to find the claimed technical teaching.

c) The designation of a natural person as the inventor in the official form provided for this purpose does not satisfy the requirements of Section 37 (1) PatG if an application is also made to supplement the description with the indication that the invention was generated or created by artificial intelligence.

d) The addition of a sufficiently clear designation of the inventor by stating that the inventor has induced a specified artificial intelligence to generate the invention is legally irrelevant and does not justify the rejection of the application pursuant to Section 42 (3) PatG.

BGH, decision of June 11, 2024 - X ZB 5/22 - Federal Patent Court

The X. Civil Senate of the Federal Court of Justice on June 11, 2024 by the presiding judge Dr. Bacher, the judges Hoffmann and Dr. Deichfuß and the judges Dr. Kober-Dehm and Dr. Marx

decided:

The appeal on points of law and the cross-appeal against the decision of the 11th Senate (Technical Appeal Senate) of the Federal Patent Court of November 11, 2021 are dismissed.

The costs of the appeal proceedings are set off against each other.

Reasons:

1 The applicant seeks the grant of a patent for which an artificial intelligence is named as the inventor.

2 A. The applicant filed patent application 10 2019 128 120.2 on October 17, 2019.

3 Claim 1 formulated in the application reads:

> A food or beverage container comprising:
> a wall defining an inner chamber of the container, the wall having inner and outer surfaces and being of substantially uniform thickness;
> wherein the wall has a fractal profile with corresponding convex and concave fractal elements on corresponding elements of the inner and outer surfaces; and whereby the convex and concave fractal elements form depressions and elevations in the profile of the wall.

4 An example of an embodiment is shown in axial cross-section in Figure 1 below.

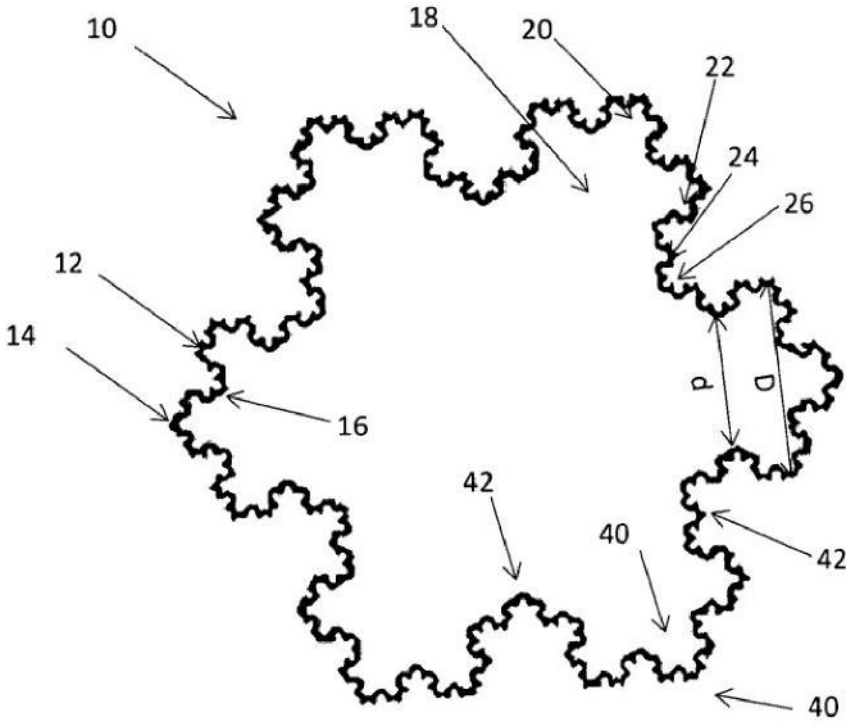

Fig. 1

5 The designation of inventor submitted on the same day on the official form provided for this purpose contains the following information:

> DABUS -
> The invention was created independently by artificial intelligence.

6 The patent office rejected the application after prior notice on the grounds that only a natural person could be named as the inventor.

7 The President of the Patent Office intervened in the appeal proceedings brought against this pursuant to Sec. 77 PatG.

8 In the appeal proceedings, the applicant primarily requested that the above-mentioned designation of inventor be allowed with the addition "c/o Stephen L. Thaler, PhD".

9 With his first auxiliary request, the applicant sought a declaration that no designation of inventor was required.

10 His second auxiliary request was aimed at naming him as the inventor and supplementing the first page of the description as follows:

> The present invention was created by an artificial intelligence called DABUS.

11 With his third auxiliary request, the applicant sought the following inventive step:

> Stephen L. Thaler, PhD,
> which prompted the artificial intelligence DABUS to generate the invention.

12 The Patent Court set aside the decision of the Patent Office, rejecting the further appeal, and referred the case back to the Patent Office with the proviso that the designation of the inventor pursuant to auxiliary request 3 was to be recognized as having been filed in due time and form.

13 With its appeal on points of law admitted by the Patent Court, the President of the Patent Office seeks to have the decision set aside insofar as the appeal was granted. The applicant opposes the appeal and pursues his claims rejected by the Patent Court with the interlocutory appeal. The President opposes this appeal.

14 B. The appeal on points of law, which is admissible by virtue of admission and also admissible in other respects, and the cross-appeal, which is also admissible, are unsuccessful.

15 I. The Patent Court essentially justified its decision as follows:

16 The main request and auxiliary request 1 are not justified. According to the current legal situation, only natural persons, but not machines, may be named as inventors. From the decision taken by the legislator to recognize the inventor's status as an inventor ("inventor's honour") with the right of the inventor to be named, it follows for German law that an artificial intelligence cannot be named as an inventor or co-inventor.

17 Auxiliary request 2 is also unfounded. The amendment of the description sought thereby would inadmissibly extend the disclosure content of the application compared to the documents filed on the filing date.

18 The designation of the inventor provided for in auxiliary request 3 is not to be contested, since it contains the designation of a natural person in the field provided and it is also noted that the inventor is also the applicant. The additional reference to artificial intelligence does not violate Sec. 7 (2) PatV. The provision does not contain an exhaustive list. It cannot be inferred from it that further information is not permitted. The official form does not contain such a restriction either. It contains at least two fields for information that is not included in the catalog of Sec. 7 (2) PatV, namely the applicant's/representative's sign and the request not to be named as inventor.

19 II. This stands up to legal review.

20 (1) The Patent Court rightly concluded that the main request is unfounded.

21 a) An inventor within the meaning of Sec. 37 (1) PatG can only be a natural person. A machine system consisting of hardware or software cannot be designated as an inventor even if it has artificial intelligence functions.

22 aa) Pursuant to Sec. 37 (1) sentence 1 PatG, the applicant must name the inventor or inventors within fifteen months of the relevant date for filing the application and affirm that no other persons within his knowledge are involved in the invention.

23 This provision ties in with the basic provision in Sec. 6 PatG. According to this, the inventor or his legal successor has the right to the patent.

24 bb) An inventor within the meaning of this provision was already understood to be the (natural) person whose creative activity gave rise to the invention on the basis of the provision in Sec. 3 PatG, old version, which was identical in content.

25 (1) With the introduction of the latter provision in 1936 and the associated departure from the previously applicable applicant principle, the principles developed in the case law of the Reichsgericht on so-called operating, service and shareholder inventions lost their foundation (BGH, judgment of November 16, 1954 - I ZR 40/53, GRUR 1955, 286, 288 f. - Schnellkopiergerät; judgment of May 5, 1966 - Ia ZR 110/64, GRUR 1966, 558, 560 - Spanplatten).

26 Accordingly, the vast majority of the literature assumes that only a natural person can be an inventor (Melullis in Benkard, PatG, 12th ed. 2023, § 6 para. 31; Keukenschrijver in Busse/Keukenschrijver, PatG, 9th ed. 2020, § 6 para. 13; Moufang in Schulte, PatG, 11th ed. 2022, § 6 para. 18; Ann, Patentrecht, 8th ed. 2022, § 1 para. 25; Mes, PatG, 5th ed. 2020,§ 6 para. 10; Dornis, GRUR 2021, 784, 791; Dornis, Mitt. 2020, 436, 439; Dornis, GRUR Patent 2023, 14 para. 15; Krausen, GRUR 2023, 841, 844; Heinze/Engel in Ebers/Heinze/Krügel/Steinrötter, Künstliche Intelligenz und Robotik, 1st ed. 2020, § 10 para. 83; Konertz/Schönhof, ZGE 2018, 379, 402; Meitinger, Mitt. 2017,149; Meitinger, Mitt. 2020, 49 f.; Ménière/Pihlajamaa, GRUR 2019, 332, 335; Rektorschek, Mitt. 2017, 438, 442; Schaub, JZ 2017, 342, 347; Schneider/ Kremer, ITRB 2020, 166, 168; for an opening of the term Köllner, Mitt. 2022,

193, 199; Nägerl/Neuburger/Steinbach, GRUR 2019, 336, 340; Schröler/Kuß in Chibanguza/Kuß/Steege, Künstliche Intelligenz, 1st ed. 2022, E. para. 82, 85 ff.).

27 The Legal Board of Appeal of the European Patent Office came to the same conclusion on the basis of the similar provisions in Art. 81 and Art. 60(1) EPC (EPO, decision of December 21, 2021 - J 8/20, para. 4.2 et seq.).

28 The same conclusion has been reached in case law on national regulations in other countries that also require the designation of an inventor. The courts dealing with this issue have almost uniformly rejected the designation of an artificial intelligence as an inventor on the grounds that only a natural person can be designated as an inventor (UK Supreme Court, judgment of December 20, 2023 - [2023] UKCS 49, para. 54 f.; Court of Appeal for England and Wales, judgment of September 21, 2021 - [2021] EWCA Civ 1374, para. 32 et seq,149; Federal Court of Australia, judgment of April 13, 2022 - [2022] FCAFC 62, GRUR Int 2022, 731, para. 84 et seq., 123; United States Court of Appeals for the Federal Circuit, judgment of August 5, 2022 - 2021-2347; High Court of New Zealand, judgment of March 17, 2023 - [2023] NZHC 554, para. 33).

29 (2) This understanding is consistent with the wording of Sec. 6 PatG, which is linked to an actual process, and with the system of the provision, which presupposes that the inventor can be the holder of a right.

30 According to the case law of the Senate, the status of inventor is not only the result of an actual process, namely the discovery of a new technical teaching. Rather, it also includes legal relationships. Thus, the status of inventor establishes the right to a patent. In addition, the inventor's personality right arises (BGH, judgment of October 24, 1978 - X ZR 42/76, BGHZ 72, 236 = GRUR 1979, 145, 148 - Aufwärmvorrichtung; Judgment of June 20, 1978 - X ZR 49/75, GRUR 1978, 583, 585 – Motor Kettensäge; Judgment of March 17, 1961 - I ZR 70/59, GRUR 1961, 470, 472 - Mitarbeiter- Urkunde).

31 b) Contrary to the applicant's view, the possibility of using artificial intelligence systems to find technical teachings does not give rise to either the possibility or the necessity of a different understanding of Sec. 6 and Sec. 37 (1) PatG.

32 aa) The designation of a natural person as inventor is also possible if a system with artificial intelligence has been used to find the claimed technical teaching.

33 (1) In this context, it can be left open whether and under what conditions the use of such systems precludes the assumption that a technical teaching thus found is based on an inventive step.

34 According to Sec. 4 sentence 1 PatG, which corresponds to Art. 56 sentence 1 EPC, an invention is deemed to involve an inventive step if it is not obvious to a person skilled in the art from the prior art. For the assessment of this question, it is not decisive which considerations the inventor has made in order to find the claimed teaching. Rather, the decisive factor is whether the prior art gave rise to this teaching.

35 Irrespective of this, the designation as inventor does not presuppose that the subject matter of the application is patentable. It merely indicates which persons, to the applicant's knowledge, were involved in a legally significant way in the discovery of the claimed teaching and have therefore acquired the original rights to the invention.

36 (2) Such an assignment does not require a contribution with independent inventive content.

37 According to the established case law of the Federal Court of Justice, it is not necessary for this contribution to have independent inventive content in order to assess whether a creative contribution justifying the status of (co-)inventor exists. It is also inappropriate to examine the individual features of the claim to determine whether they are known per se in the prior art. Only those contributions that have not influenced the overall success, i.e. are insignificant in relation to the solution, are to be excluded, as well as those that were created on the instructions of an inventor or a third party (see only BGH, judgment of August 4, 2020 - X ZR 38/19, GRUR 2020, 1186 para. 114 - Mitral valve prosthesis).

38 (3) Based on these principles, a human contribution that has significantly influenced the overall success is sufficient for the status of inventor in a technical teaching that was discovered with the help of an artificial intelligence system.

39 The question of what type or intensity a human contribution must have in order to justify such an attribution, which is disputed in detail, is not of decisive importance. In particular, there is no need to conclusively determine whether the position as manufacturer, owner or possessor of such a system is sufficient or whether actions with a closer connection to the technical teaching found are required, such as special measures of programming or data training, initiating the search process that brought the claimed teaching to light, checking and selecting from several results proposed by the system or other activities (cf. on these questions Nägerl/Neuburger/Steinbach, GRUR 2019, 336, 341; Staehelin, GRUR 2022, 1569, 1571; Köllner, Mitt. 2022,193, 199 et seq.; Meitinger, Mitt. 2020, 49, 50; Mes, PatG, 5th ed. 2020, § 6 para. 10; see also Konertz/Schönhof, ZGE 2018, 379, 410; Hetmank/Lauber-Rönsberg, GRUR 2018, 574, 581; Meitinger, Mitt. 2017, 149 et seq.; Kim, GRUR Int 2020, 443,455; Gajeck/Scheibe, RDI 2023, 408, 413 f.).

40 Regardless of how these questions are to be assessed, it remains possible to identify such human contributions even when using systems with artificial intelligence and to derive the status of inventor from this through legal assessment. According to the current state of scientific knowledge, there is no such thing as a system that searches for technical teachings without any human preparation or influence (Gajeck/Scheibe, RDI 2023, 408, 410; Dornis, GRUR Patent 2023, 14 para. 12 f.; Gärtner, GRUR 2022, 207; Shemtov, A study on inventorship in inventions involving AI activity, February 2019, p. 9 f., available at https://beck-link.de/zv4nb).

41 (4) The case law, according to which an invention is inconceivable without an inventor (BGH, judgment of May 5, 1966 - Ia ZR 110/64, GRUR 1966, 558, 560 - Spanplatten), does not lead to a different assessment.

42 This case law merely states that the rights to an invention, as already shown above, cannot arise originally in favor of an organization, but only in favor of natural persons who were significantly involved in the discovery of the technical teaching. It thus confirms that the designation of a natural person as inventor is required.

43 (5) Contrary to the opinion of the applicant, this legal situation does not result in any unreasonable requirements with regard to the obligation to provide truthful information stipulated in Sec. 37 (1) sentence 1 and Sec.124 PatG.

44 As explained above, the fact that an artificial intelligence system has made a substantial contribution to the discovery of a technical teaching does not contradict the assumption that there is at least one natural person who is to be regarded as the inventor on the basis of his contribution. Against this background, it is possible and reasonable for the applicant to name (at least) one inventor even if, in his view, an artificial intelligence system has made the main contribution.

45 As with the use of traditional means, the applicant must make the required assessment on the basis of his knowledge (Sec. 37 (1) sentence 1 PatG) and make truthful declarations to the Patent Office (Sec. 124 PatG). In principle, the Patent Office is not responsible for checking the content of the designation of the inventor.

46 An incorrect assessment has no direct effect on the application procedure. Pursuant to Sec. 7 (1) PatG, the applicant is deemed to be entitled to demand the grant of the patent in the interest of a delay-free procedure. Persons who consider themselves to be the authorized inventor instead of the designated person can request the assignment of the right to the grant of the patent outside the application procedure pursuant to Section 8 (1) PatG and consent to the correction of the designation of the inventor pursuant to Section 63 (2) sentence 1 PatG.

47 bb) Since the applicant regularly has a reasonable way of filing the application even when using systems with artificial intelligence, a different understanding of the law is not required in view of the position of the person entitled to the invention in terms of property rights protected by the Basic Law.

48 c) Since the designation of DABUS as inventor does not satisfy the requirements of Sec. 37 (1) PatG and the applicant has not remedied this deficiency despite being requested to do so, the application in the version of the main request must therefore be rejected pursuant to Sec. 42 (3) sentence 1 PatG.

49 2. The Patent Court also correctly considered auxiliary request 1 to be unfounded.

50 A designation of inventor is also required under Sec. 37 (1) PatG if an artificial intelligence system has been used to find the claimed technical teaching.

51 As explained in detail above, the attribution of the invention to a natural person provided for in Sec. 6 PatG is also possible and reasonable under the aforementioned conditions. In view of this alone, an exception to the mandatory requirement provided for in Sec. 37 (1) PatG cannot be considered.

52 3. As a result, the Patent Court was also right to regard auxiliary request 2 as unfounded.

53 It remains to be seen whether the supplementation of the description sought by auxiliary request 2 leads to the subject matter of the application going beyond the content of the documents originally filed.

54 a) The amendment sought is in any case not admissible because it calls into question the designation of the applicant as inventor and therefore results in the designation of the inventor as a whole not meeting the requirements of the § Sec. 37 (1) PatG is sufficient.

55 The designation of the inventor must be unambiguous and conclusive in terms of content (thus correctly BPatG, decision of March 15, 1983 - 19 W (pat) 33/82, BlPMZ 1984, 53; Keukenschrijver in Busse/Keukenschrijver, PatG, 9th ed. 2020, § 37 para. 16; Moufang in Schulte, PatG, 11th ed. 2022, § 37 para. 21).

56 In the present case, it is not only the information in the form for the designation of the inventor - which is not in itself objectionable - that is relevant, but also the addition to the description sought in the auxiliary request 2.

57 The reference provided in this respect that the invention was created by the artificial intelligence DABUS does not clearly indicate whether the information in the form is merely to be supplemented by a designation of auxiliary means used or whether it is to be called into question in terms of content. Thus, the application as a whole lacks a clear indication of the inventor.

58 b) Irrespective of this, the request for supplementation does not satisfy the requirements of Section 38 sentence 1 PatG.

59 Pursuant to Section 38 sentence 1 PatG, amendments to the information contained in the application are admissible until the decision on the grant of the patent, provided that they do not extend the subject matter of the application. However, until receipt of the request for examination pursuant to Section 44 PatG, this only applies insofar as it concerns the correction of obvious inaccuracies, the elimination of deficiencies specified by the examining section or amendments to the patent claim.

60 In the case in dispute, an amendment of the description is not admissible because a request for examination has not been filed, the patent court has not objected to the content of the description and it is not a matter of correcting an obvious inaccuracy.

61 4. As a result, the Patent Court rightly considered the designation of the inventor requested in auxiliary request 3 to still be admissible.

62 Contrary to the opinion of the appellant, the statement added to the designation of the applicant as inventor that the inventor had caused the artificial intelligence DABUS to generate the invention does not constitute sufficient grounds for refusing the application.

63 a) Despite this addition, the designation of the inventor sought in auxiliary request 3 satisfies the requirements of Sec. 37 (1) Patent Act.

64 The addition in question makes it sufficiently clear that DABUS is not indicated as a co-inventor, but only as a means used by the applicant to find the claimed technical teaching.

65 The applicant is thus clearly named as the inventor. This statement is also conclusive in itself. Whether the legal assessment on which it is based is correct in terms of content cannot be verified in the application procedure.

66 b) The additional information does not violate the requirements of § 7 PatV.

67 According to Section 7 (1) PatV, the form issued by the Patent Office must be used when naming the inventor in writing. § Section 7 (2) PatV stipulates which information the designation of the inventor must contain.

68 None of these requirements result in a general prohibition to provide additional information in individual cases that is important from the applicant's point of view

69 c) The additional information also does not violate the requirement from § Sec. 9 (2) DPMA Ordinance, according to which forms should be completed in such a way that they can be entered and processed automatically.

70 As the appellant rightly points out, this requirement may be violated if the applicant leaves it to the patent office to filter out the relevant data from arbitrary or insufficiently structured information.

71 However, these requirements are not met in the case in dispute.

72 As already explained above, it is sufficiently clear from the information that the applicant names himself as the inventor. The additional - for the reasons explained above legally irrelevant - information on the use of artificial intelligence is easily separable from the designation of the inventor and can be disregarded for the collection and processing of the data.

73 Thus, there is no violation of Sec. 9 (2) DPMAV. Whether a violation of this provision could lead to a rejection under Sec. 42 (3) PatG, although it is only formulated as a mandatory provision, therefore does not require a conclusive decision.

74 III. The decision on costs is based on Sec. 109 (1) sentence 2 PatG.

75 IV. The Senate has dispensed with an oral hearing in accordance with Sec. 107 (1) PatG.

Bacher Hoffmann Deichfuß

Kober-Dehm Marx

Previous court:
Federal Patent Court, decision of 11/11/2021 - 11 W (pat) 5/21 -