

Non-official translation

11 W (pat) 5/21

(file number)

Announced at

November 11, 2021

Spanier

Judicial officer as clerk
of the court registry

ORDER

In the appeal case

Dr. phil. Stephen L. Thaler, 1767 Waterfall Drive, 63303 St. Charles, Missouri (USA),

Applicant and Appellant,

Authorized representative: Köllner & Partner mbB, Patentanwälte, Vogelweidstraße 8, 60596 Frankfurt am Main,

Other party to the proceedings:

President of the German Patent and Trademark Office, Zweibrückenstraße 12, 80331 München,

regarding the patent application 10 2019 128 120.2

(here: refusal of the application),

the 11th Senate (Technical Appeals Board) of the Federal Patent Court, on the oral proceedings held at November 11, 2021, with the participation of the presiding judge Dr.-Ing. Höchst and the judges Eisenrauch, Dr.-Ing. Schwenke and Dipl.-Chem. Dr. rer. nat. Deibele,

decided:

1. On the appeal by the applicant, the decision of the Examining Division 57 of the German Patent and Trademark Office of March 24, 2020, is set aside and the case remitted to the German Patent and Trademark Office with the proviso that the designation of the inventor filed with the brief of February 23, 2021, as "Annex B4" is to be recognized as having been filed in due time and form.
2. As to its further extent, the appeal is dismissed.
3. The appeal on points of law is admitted.
4. The divisional application (declaration of division submitted by the applicant with the brief of November 2, 2021, and received by the Federal Patent Court by fax on the same day) will be forwarded to the German Patent and Trademark Office.

R e a s o n s

I.

The appellant, a natural person, is the applicant of the patent application filed with the German Patent and Trademark Office (DPMA) on October 17, 2019, which has been assigned the file number 10 2019 128 120.2. According to the duly subsequently filed German translation, the subject matter of the application is a "FOOD CONTAINER". The designation of the inventor, which had been filed on the filing date using the official form P 2792, contained neither the name of the applicant nor that of another natural person in the field provided for this purpose, but instead the following statement: "DABUS - The invention was autonomously generated by an artificial intelligence."

1. In its office action of December 9, 2019, the competent examination division of the DPMA informed the applicant - mutatis mutandis - that the filed designation of the inventor does not comply with the statutory provisions. Only a natural person can be an inventor within the meaning of §§ 6, 37 of the Patent Act. A natural person is to be understood as a human being who has legal capacity under § 1 of the Civil Code. This obviously does not apply to an "artificial intelligence". Therefore, the form for designating the inventor, which the applicant had filed

on the filing date, can not be recognized as designating the inventor within the meaning of § 37 of the Patent Act and § 7 of the Patent Regulations. Instead, the applicant should expect that the application is going to be refused under § 42 in conjunction with § 37 of the Patent Act.

In response, the applicant filed a slightly amended designation of the inventor in the brief of January 17, 2020, in which he merely added an address suffix, namely "c/o Thaler, S."

Analogously, the applicant submitted that it would not correspond to the factual circumstances if he would designate himself as inventor. The artificial intelligence (AI) developed by him, called DABUS, had produced the invention acting autonomously. DABUS is a completely autonomously operating neural network, which is able to generate new technical solutions even without being provided a corresponding task. He, the applicant, is the owner of this AI. He had no influence on the task and the corresponding solution, which led to the present invention. The German Patent Act does not expressly stipulate that an inventor must be a natural person. The understanding that an invention can only be created by a human being is based on a purely anthropocentric definition of the term "creative" which has become outdated. The term "inventor" must always be reinterpreted in the light of the technical progress, which, ultimately, is the task of the courts.

With its decision of March 24, 2020, which was notified to the applicant's representative on March 30, 2020, the Examining Division 57 of the DPMA rejected the patent application for the reasons it had previously set out in its office action of Dec. 9 2019.

2) The applicant's appeal, which was received by the DPMA on April 22, 2020, is directed against this decision. The Examining Division 57 of the DPMA did not grant a rectification of its decision, but referred the appeal to the Federal Patent Court for a decision.

a) The applicant is of the opinion that the facts of the case do not justify the refusal of the application. As applicant, he is caught in the following dilemma: On the one hand, he is obliged under § 124 of the Patent Act to truthfully designate the inventor, i.e. in this case the DABUS system, which is undoubtedly the creator of the invention; on the other hand, this dutiful designation of the inventor has the consequence that his application is being rejected. Ultimately, the position of the examining division has the factual consequence that he is deprived of the right to the patent, which, however, he is entitled to according to § 6 of the Patent Act as the owner of the DABUS system. This would be a violation of Art. 14 of the constitution. Furthermore, within the scope of the examination of formalities according to § 42 of the Patent Act, only clear and obvious deficiencies of an application may be objected to. The question raised with respect to § 37 of the Patent Act and § 7 of the Patent Regulations as to whether, due to the special features of the individual case, an AI must exceptionally be designated as inventor, would go beyond this scope. Since this is a complex legal question on which there is no established case law, a corresponding clarification cannot be achieved within the existing framework of the examination of formalities.

Moreover, it cannot be assumed that the legislator intended to exclude inventions generated by an AI from patent protection. A different intention can also not be derived from § 63 (2) of the Patent Act, which refers to the "person of the inventor". Rather, it must be assumed that the historical legislator simply did not foresee the possibility that an invention could also be made by an AI.

b) By court actions of September 19, 2020 and November 10, 2020, the applicant was informed that the appeal was not likely to be successful after preliminary examination of the factual and legal situation.

3. By its decision of May 31, 2021, the Senate ordered the President of the DPMA to intervene in the appeal proceedings pursuant to § 77 first sentence of the Patent Act. In addition to the question raised by the appellant as to whether only natural persons may be designated as inventors within the meaning of § 37 of the Patent Act and § 7 of the Patent Regulations, the Senate also considered it necessary to clarify whether supplementary information in the designation of the inventor, e.g. concerning the creation of the invention, would have to be tolerated. The President of the DPMA finally intervened in the appeal proceedings by the brief dated August 31, 2021.

4. a) By its brief of November 3, 2021, the applicant finally submitted a new, slightly revised designation of the inventor referred to as "Annex B8", in which he - taking up a suggestion of the other party to the proceedings - replaced the term "legal succession" by the term "acquisition of rights" and clarified the address suffix on page 1 to "c/o Stephen L. Thaler, PhD":



Deutsches
Patent- und Markenamt

Anlage B8

Erfinderbenennung

Die Erfinderbenennung muss auch erfolgen, wenn der Anmelder selbst der Erfinder ist. Ist der Anmelder Miterfinder, so ist er auch mitzubennennen.



Amtesliches Abkürzzeichen (wenn bereits bekannt)

DE 10 2019 128 120.2

Platz für Zeichen des Anmelders/Vertreters

Bezeichnung der Erfindung (bitte vollständig)

LEBENSMITTELBEHÄLTER / FOOD CONTAINER

Erfinder (1)

Vor- und Zuname

DABUS - Die Erfindung wurde selbstständig durch eine künstliche Intelligenz erzeugt.

c/o Stephen L. Thaler, PhD

Straße, Hausnummer

1767 Waterfall Drive

Postleitzahl

Ort

63303

St. Charles / Missouri, USA

Erfinder (2)

Vor- und Zuname

Straße, Hausnummer

Postleitzahl

Ort

Erfinder (3)

Vor- und Zuname

Straße, Hausnummer

Postleitzahl

Ort



Erfinder (4)	
Vor- und Zuname	
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Straße, Hausnummer	
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Postleitzahl	Ort
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Achtung: bei mehr als vier Erfindern bitte gesondertes Blatt benutzen!	

Das Recht auf das Patent ist auf den Anmelder übergegangen durch:
(z.B. Erfinder ist/ist die/die Anmelder, Inanspruchnahme aufgrund §§ 6 u. 7 ArbNErG, Kaufvertrag mit Angabe des Datums, Erbschaft usw.)

Durch Rechtswerb, da Stephen L. Thaler der Eigentümer der künstlichen Intelligenz ist.
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b) Part of the proceedings is also an earlier designation of the inventor filed with the brief dated February 23, 2021, referred to as "Annex B6", in which the applicant duly designated himself as inventor ("Stephen L. Thaler, PhD"), and a new page 1 of the specification filed as "Annex B5", which additionally contains the following introductory text: "The present invention was created by an artificial intelligence called DABUS."

c) With the same brief of February 23, 2021, the applicant also submitted a designation of the inventor referred to as "Annex B4" in which the applicant again designates himself as inventor - similar to "Annex B5" - but in which a text passage comparable to the one of "Annex B5" is included in the designation of the inventor itself, namely that the applicant prompted the artificial intelligence called DABUS to create the invention:



Deutsches
Patent- und Markenamt

Erfinderbenennung

Die Erfinderbenennung muss auch erfolgen, wenn der Anmelder selbst der Erfinder ist. Ist der Anmelder Miterfinder, so ist er auch mitzubennennen.



Amtliches Aktenzeichen (wenn bereits bekannt) DE 10 2019 128 120.2 Platz für Zeichen des Anmelders/Vertreters [REDACTED]
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Bezeichnung der Erfindung (bitte vollständig) LEBENSMITTELBEHÄLTER / FOOD CONTAINER
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Erfinder (1) Vor- und Zuname Stephen L. Thaler, PhD der die künstliche Intelligenz DABUS dazu veranlasst hat, die Erfindung zu generieren Straße, Hausnummer 1767 Waterfall Drive Postleitzahl Ort 63303 St. Charles / Missouri / USA

Erfinder (2) Vor- und Zuname Straße, Hausnummer Postleitzahl Ort

Erfinder (3) Vor- und Zuname Straße, Hausnummer Postleitzahl Ort



Erfinder (4)	
Vor- und Zuname	
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Straße, Hausnummer	
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Postleitzahl	Ort
<input type="text"/>	<input type="text"/>
Achtung: bei mehr als vier Erfindern bitte gesondertes Blatt benutzen!	

Das Recht auf das Patent ist auf den Anmelder übergegangen durch:

(z.B. Erfinder ist/sind der/die Anmelder, Inanspruchnahme aufgrund §§ 6 u. 7 ArbNErG, Kaufvertrag mit Angabe des Datums, Erbschaft usw.)

Erfinder ist Anmelder
<input type="text"/>
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The applicant has requested that

the decision of the Examining Division 57 of the German Patent and Trademark Office of March 24, 2020 be set aside and that the designation of the inventor submitted as "Annex B8" in the brief of November 3, 2021, be recognized as having been filed in due time and form. Furthermore, the applicant has requested - in each case again combined with the request to set aside the contested decision - auxiliary

1. to declare "that no designation of the inventor is required in the present case, since no natural person fulfills the requirements of inventorship. The right to the patent has passed to the applicant by acquisition of rights, since Stephen L. Thaler is the owner of the artificial intelligence called DABUS.",
2. to accept the designation of the inventor referred to as "Annex B6" and the amended page 1 of the description of the patent application referred to as "Annex B5", each of which submitted in the brief of February 23, 2021, as having been filed in due time and form, or to accept them as new page 1 of the description, and

3. to accept the designation of the inventor submitted as "Annex B4" in the brief of February 23, 2021, as having been filed in due time and form.

In the brief of November 2, 2021, which was received by the Federal Patent Court on the same day, the applicant declared the division of the disputed application and filed corresponding documents.

5. The President of the DPMA has not filed any request; however, she disagrees with the applicant's argument in its entirety:

a) The applicant's main and first auxiliary request are already not allowable, since, according to the intention of the legislator of the Patent Act and the legislator of the Patent Regulations, the designation of (at least) one natural person as inventor is mandatory. This is evident from the fact that § 37 (1) of the Patent Act refers to "persons" and § 7 (2) Nr. 1 of the Patent Regulations requires the specification of "first names" and "names" of the inventors, which naturally only applies to natural persons. The necessity of a natural person is additionally underlined by further systematics of German Patent Law. § 63 (1) of the Patent Act, for example, grants the inventor the right to be designated as such on application publications and patent documents, which is an expression of a special personality right of the inventor that is only granted to natural persons. In addition, it is not comprehensible why the fundamental link of the legislator to a "human inventor" - even taking into account the technical progress - has to be questioned.

b) In addition, the second auxiliary request is not allowable either, since the addition of the opening statement to the description that "the present invention ... (was) created by an artificial intelligence called DABUS", carries the risk of an inadmissible extension. Moreover, the addition also constitutes a violation of the provision of § 10 (3) of the Patent Regulations, which prohibits any explanations with respect to the invention in the description that are obviously not necessary.

c) Furthermore, the third auxiliary request is also to be rejected, since supplementary information in the designation of the inventor regarding the way an invention had been created constitutes a violation of § 7 (2) of the Patent Regulations. In addition, the catalog of § 7 (2) of the Patent Regulations is exhaustive. The added statement that the applicant had prompted the artificial intelligence called DABUS to create the invention is, moreover, a statement concerning the substantive correctness of the designation of the inventor. According to § 7 (1) of the Patent Regulations, such statements are outside the examination competence of the DPMA and are therefore inadmissible.

6. As to the further arguments of the parties to the proceedings, reference is made to the contents of the files.

II.

The appeal is partially successful on the merits. It leads to the annulment of the contested decision and to the remittal of the case to the DPMA.

1. Admissibility of the appeal

The applicant is formally adversely affected by the refusal of his application. Furthermore, the discerning Senate assumes in favor of the applicant that, with his appeal, he does not only pursue a scientific interest in the clarification of an interesting legal question, which would deprive his appeal of admissibility due to lack of interest in legal protection (cf. BPatG GRUR 2013, 78ff. – "RDM"; also: *Kubis* in Fitzner/Lutz/Bodewig, PatRKomm, 4th ed., PatG § 73 marginal no. 25), but still seeks to acquire an intellectual property right and thus pursues a legitimate economic interest.

The applicant, however, overlooks that, according to German law, it is irrelevant for the assessment whether an invention exists and is based on an inventive step in the sense of § 4 of the Patent Act on which actual development the invention is based and whether designated persons are to be regarded as inventors in an appropriate manner; an invention is judged according to objective criteria, so that it is not relevant whether it is based on conscious thought, systematic work with planned experiments or merely on the exploitation of coincidentally discovered relationships governed by the laws of nature or - as here - on the use of AI (cf. *Busse/Keukenschrijver*, PatG, 9th ed., § 4 marginal no. 13; BGH GRUR 2016, 475, 481 - "Rezeptortyrosinkinase"). In none of the cases mentioned, a recognizable necessity exists to dispense the designation of a natural person as the inventor in order to obtain the sought-after patent.

From this, it follows that the "dilemma" described by the applicant of, on the one hand, dutifully and truthfully designating the system DABUS as inventor according to § 124 of the Patent Act and, on the other hand, to experience the rejection of the application does not exist at all. The duty of truth regulated in § 124 of the Patent Act refers exclusively to factual circumstances, whereas the applicant's conviction that not he himself but his AI developed by him is the inventor is merely a legal opinion. Since the expression of legal opinions is not subject to the duty of truth (cf. e.g. *Schulte/Schell* PatG, 10th ed., § 124 marginal no. 7; *Hofmeister* in Fitzner/Lutz/Bodewig, Patkomm, 4th ed., PatG § 124 marginal no. 2; BGH GRUR 2006, 754, 756, marginal no. 18 - "Haftetikett"), there is no legal hindrance for the applicant to designate himself as inventor.

Nevertheless, the applicant's interest in legal protection cannot be denied. His conviction that an AI must be considered as inventor in the same way as a natural person and that the designation of a corresponding system as inventor must be admissible reflects a legal opinion which, by now, is regarded as justifiable by some voices (cf., e.g., the references in *Dornis* in GRUR 2021, 784 ff.). For the Australian patent law system, the Federal Court of

Australia has meanwhile affirmed the possibility of designating an AI as inventor in a decision of July 30, 2021 (cf. Ref.: VID 108 of 2021). In the light of this, it would not appear appropriate to deny the applicant the present prosecution of rights from the outset on the grounds that he would have had (albeit contrary to his own opinion) the opportunity to designate himself as inventor at any time.

2. Substance of the appeal

a) Main request and first auxiliary request

Neither the main request nor the first auxiliary request are allowable. According to the present version of § 37 (1) of the Patent Act, there is no room to designate the system DABUS, as specified in "Annex B8", as inventor; the same applies to the first auxiliary request filed by the applicant, by which the latter seeks a ruling that no natural person fulfills the requirements of inventorship and, thus, the filing of a designation of the inventor is not required at all. The first auxiliary request is obviously incompatible with the requirement to designate an inventor under § 37 (1) of the Patent Act; from the legal fiction of § 7 (1) of the Patent Act, it follows that the applicant must designate himself in case of doubt.

aa) The discerning Senate, which has become competent to conduct the examination of formalities under § 42 of the Patent Act by virtue of the appeal filed (cf. BGH GRUR 2019, 766, 767 - "Abstandsberechnungsverfahren"), is not hindered in the present case - contrary to the applicant's view - from making a decision to the applicant's disadvantage by the special character of the examination of formalities. It is true that an examination under § 42 of the Patent Act is limited to the question whether a submitted designation of the inventor has obvious defects with respect to the requirements of § 37 (1) of the Patent Act and § 7 of the Patent Regulations (cf. BPatG GRUR 2009, 50, 52 - "Offensichtlichkeitsprüfung"). However, the standard for determining whether a defect is obvious and beyond doubt is not the special, but rather the regular case. According to common practice, which is considered to be correct, the latter includes that only a natural person can be designated as inventor. From this, it follows that the fact that there is no established case law regarding the inventorship of an AI has a negative effect against the applicant.

bb) On the merits, the discerning Senate agrees with the opinion of the other party to the proceedings, namely that according to the present legal framework, which results from § 37 (1) of the Patent Act, only natural persons, but not machines can be designated as inventors. § 37 (1) of the Patent Act, which is to be seen in conjunction with § 63 of the Patent Act, constitutes a right of the inventor to be designated, by which it is intended to express a recognition of his inventiveness ("inventor's honor") (cf. Benkard/Schäfers/Schwarz, PatG, 11th ed., § 37 marginal no. 4 and § 63 marginal no. 2; *Schneckenbühl* in Fitzner/Lutz/Bodewig, Patkomm, 4th ed, PatG § 63 marginal no. 2 f.; Busse/Keukenschrijver, PatG, 9th ed., § 37 marginal no. 4). From the decision thus deliberately taken by the legislator, it follows that, under German patent law, an AI can never be designated as inventor or co-inventor

(cf. Schulte/Moufang, PatG mit EPÜ, 11th ed. § 6 marginal no. 18; Busse/Keukenschrijver, op. cit.; Stortnik in Fitzner/Lutz/Bodewig, PatKomm. 4th ed. PatG § 37 marginal no. 2 f.).

The objection of the applicant that the historical legislator did not foresee the possibility that an invention could also be created by an AI is not sufficient for a judicial ruling as suggested by the applicant.

The opening of the designation of the inventor for an AI by way of a judicial ruling requires the finding that the regulation of § 37 of the Patent Act and that of § 63 of the Patent Act would have subsequently become incomplete due to a change in the facts of life, namely due to the emergence of artificial intelligences (cf. Wiedemann, NW 2014, 2407, 2411). This would mean that the concept "person" contained in both regulations would no longer encompass all relevant facts. However, there is no indication for this. On the one hand, the two regulations mentioned include the recognition of the "inventor's honor", which cannot be awarded to an AI, and on the other hand, the exclusion of an AI from the designation of the inventor does not lead to any restriction of the patentability of the corresponding invention and thus to any economic disadvantage (cf. section I.1. above).

b) Second auxiliary request

The allowability of the second auxiliary request fails because it is directed to a subsequent amendment of the description and is thus inadmissible. The text contained in "Annex B5" according to which "the present invention (was) created by an artificial intelligence called DABUS" represents an inadmissible extension of the disclosure of the application as compared to the documents filed on the filing date. The provision of § 14 Sentence 2 of the Patent Act, according to which claims are to be interpreted with regard to the description, would altogether bear the risk of an inadmissible extension of the protected subject matter, if a patent were to be granted at a later date.

c) Third auxiliary request

On the other hand, the request made as the third auxiliary request that the designation of the inventor submitted as "Annex B4" in the brief of February 23, 2021 be recognized as having been filed in due time and form is allowable. The designation of inventor is undoubtedly not objectionable insofar as it contains the indications "Stephen L. Thaler, PhD" in the field provided for this purpose and "Inventor is applicant" as noted on page 2 of the designation. Moreover, contrary to the view of the President of the DPMA, it is not a violation of the regulation of § 7 (2) of the Patent Regulations or other regulations that the addition "who prompted the artificial intelligence DABUS to create the invention" appears under the correctly indicated inventor name of the applicant. The provision of § 7 (2) of the Patent Regulations does not constitute an exhaustive catalog: neither does the wording of paragraph 2 suggest this, nor does it follow from the fact that paragraph 1 of § 7 of the Patent Regulations prescribes the use of the official form. In this context, the applicant has rightly pointed out that form P 2792 contains at least two fields for information which is not mentioned in the catalog of § 7 (2) of the Patent Regulations, namely the field

for the "file number of the applicant/representative" and the field for the "request for not being designated as inventor". If the legislator had intended to create an exhaustive catalog by § 7 of the Patent Regulations to the effect that only the indications mentioned in the catalog of paragraph 2 would be admissible, he could have achieved this by an explicit prohibition of unnecessary indications such as, e.g., in § 10 (3) of the Patent Regulations.

The addition to the applicant's name, which is in question here, would only be problematic if the DPMA would be forced to take into account the entire information provided in the field "inventor" in its publications (patent register, disclosure specification, patent specification, etc.). However, this is not the case. In the respective field of its publications, the DPMA has a certain discretion with regard to the data to be published, which is not bound to any application provisions (cf. BGH GRUR 2003, 226, 227 - "Läägeunnerloage"). This also ultimately underlines that, in the absence of an explicit prohibition of unnecessary information in the Patent Regulations, an inventor (who may also be supported in this respect by his personal right as inventor) should not necessarily be prevented from including additions of the kind at issue here in the official form P 2792.

3. Accordingly, the decision of the Examining Division 57 of the DPMA of March 24, 2020, had to be revoked and the case remitted to the DPMA pursuant to § 79 (3) first sentence No. 1 of the Patent Act so that the Examining Division can continue with the application procedure.

4. The appeal on points of law was to be allowed with regard to the question whether an artificial intelligence (AI) can be designated as inventor within the meaning of § 37 (1) of the Patent Act and with regard to the question whether § 7 of the Patent Regulations is to be understood as exhaustive to the effect that only the indications mentioned in the catalog of paragraph 2 are admissible in the designation of inventor. Both legal questions are of fundamental importance and require a decision of the Federal Court of Justice in order to ensure a uniform application of the law (§ 100 (2) No. 1 and No. 2 Patent Law).

III.

Information on legal remedies

1. The parties to the appeal proceedings shall have the right to appeal on points of law with respect to the legal questions referred to in Section II. 4. above.

2. Irrespective of the admitted appeal (under 1.), the parties to the appeal proceedings shall have the right to appeal on points of law. To the extent that the Senate has not admitted the appeal on points of law, such appeal on points of law shall only be admissible if it is objected that

- a) the deciding court was not properly constituted,
 - b) the decision was taken by a judge who is disqualified by law from exercising the office of judge by virtue of the law or was successfully challenged on the grounds of prejudice,
 - c) a party was denied the right to be heard,
 - d) a party was not represented in the proceedings in accordance with the law, unless he/she expressly or implicitly consented to the conduct of the proceedings,
 - e) the decision was issued on the basis of an oral proceeding at which the rules on publicity of the proceedings were violated,
- or
- f) the decision does not contain reasons.

Both the admitted appeal on points of law (under 1.) and the appeal on points of law not admitted (under 2.) must be filed with the Federal Court of Justice, Herrenstrasse 452, 78133 Karlsruhe, Germany, by a lawyer admitted to practice before the Federal Court of Justice within one month of notification of the order. The time limit shall only be deemed to have been observed if the appeal is received by the Federal Court of Justice before expiry of the time limit. The time limit cannot be extended.

Dr. Höchst, Eisenrauch, Dr. Schwenke, Dr. Deibele,