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**Datasheet for the decision  
of 25 January 2024**

**Case Number:** T 1247/19 - 3.2.02

**Application Number:** 14158156.1

**Publication Number:** 2915496

**IPC:** A61B17/66, A61M5/142

**Language of the proceedings:** EN

**Title of invention:**

Implantable device

**Patent Proprietor:**

MPS Micro Precision Systems AG

**Opponent:**

Lakeview Innovation Ltd.

**Headword:**

**Relevant legal provisions:**

EPC Art. 54

RPBA Art. 12(4)

RPBA 2020 Art. 13(2)

**Keyword:**

Novelty - main request (no) - auxiliary request I (no) -  
auxiliary request II (yes)  
Late-filed evidence - submitted with the statement of grounds  
of appeal - admitted (yes)  
Late-filed facts - submitted during oral proceedings  
admitted (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

**Boards of Appeal**

**Chambres de recours**

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**Case Number: T 1247/19 - 3.2.02**

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.02**  
**of 25 January 2024**

**Appellant:** MPS Micro Precision Systems AG  
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**Representative:** Grünecker Patent- und Rechtsanwälte  
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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
27 February 2019 concerning the maintenance of  
European Patent No. 2915496 in amended form**

**Composition of the Board:**

**Chairman** M. Alvazzi Delfrate  
**Members:** D. Ceccarelli  
C. Schmidt

## **Summary of Facts and Submissions**

I. Both the patent proprietor and the opponent appealed against the Opposition Division's decision that account being taken of the amendments made by the patent proprietor according to auxiliary request I, the patent and the invention to which it relates met the requirements of the EPC.

II. Oral proceedings took place on 25 January 2024.

The appellant/patent proprietor ("the proprietor") requested that the decision under appeal be set aside and that the patent be maintained as granted (main request), that the patent be maintained on the basis of the version maintained by the Opposition Division (auxiliary request I) or that the patent be maintained on the basis of auxiliary request II, filed with the reply to the statement of grounds of the appellant/opponent ("the opponent") of 25 November 2019.

The opponent requested that the decision under appeal be set aside and that the patent be revoked.

III. The following documents are mentioned in this decision:

E9: CN 102144943 A

E9a: English machine translation of E9

IV. **Claim 1 of the main request** reads as follows:

"Implantable device (10,13,15) comprising a driving unit (25) and a kinematic assembly (27) joined together: the driving unit (25) comprising an electric motor (35) driving a first magnetic rotor (37); the

kinematic assembly (27) comprising a second magnetic rotor (41), magnetically coupled to said first magnetic rotor (37) such that it can be rotationally driven by the motor (35), and an actuator driven by the second rotor (41), wherein the driving unit (25) is enclosed into an hermetic capsule (20); and the second magnetic rotor (41) is outside the hermetic capsule (20)."

**Claim 1 of auxiliary request I** reads as follows:

"Implantable device (10, 13, 15) comprising a driving unit (25) and a kinematic assembly (27) joined together: the driving unit (25) comprising an electric motor (35) driving a first magnetic rotor (37); the kinematic assembly (27) comprising a second magnetic rotor (41), magnetically coupled to said first magnetic rotor (37) such that it can be rotationally driven by the motor (35), and an actuator driven by the second rotor (41), wherein the driving unit (25) is enclosed into an hermetic capsule (20); and the second magnetic rotor (41) is outside the hermetic capsule (20); and the implantable device has a first and a second connection regions (31,61) for attaching to bone, the actuator being arranged as to generate a relative motion of said first and second connection regions (31,61)."

**Claim 1 of auxiliary request II** reads as follows:

"Implantable intramedullary distractor for lengthening of long bones device comprising a driving unit (25) and a kinematic assembly (27) joined together: the driving unit (25) comprising an electric motor (35) driving a first magnetic rotor (37); the kinematic assembly (27)

comprising a second magnetic rotor (41), magnetically coupled to said first magnetic rotor (37) such that it can be rotationally driven by the motor (35), and an actuator driven by the second rotor (41), wherein the driving unit (25) is enclosed into an hermetic capsule (20); and the second magnetic rotor (41) is outside the hermetic capsule (20); and the implantable device has a first and a second connection regions (31,61) for attaching to bone, the actuator being arranged as to generate a relative motion of said first and second connection regions (31,61)."

Claims 2 to 12 of auxiliary request II are dependent claims.

- V. The opponent's arguments relevant to this decision may be summarised as follows.

*Admittance of E9 and E9a*

E9 and its English machine translation E9a had been filed with the opponent's statement of grounds as a reaction to the Opposition Division's decision, which had triggered an additional search. E9a was clear enough. In any case, the filing of a certified translation had been offered. E9 was highly relevant as it deprived the subject-matter of claim 1 of the request found allowable by the Opposition Division of novelty. Page 4, last paragraph of E9a disclosed an implantable prosthesis and page 3, seventh paragraph disclosed a drive unit within a hermetic capsule. For these reasons, E9 and E9a had to be admitted into the proceedings.

*Main request - novelty over E9*

E9 was novelty-destroying for the subject-matter of claim 1 of the main request. It disclosed an implantable device in the form of an artificial prosthesis for reconstructing defective bone (page 4, last paragraph of E9a). The prosthesis had been described as "non-invasive" only because it did not need multiple surgeries (page 2, second and third paragraphs of E9a). E9 also disclosed a driving unit comprising an electric motor and a driving first magnetic rotor of a permanent magnet coupling enclosed in a moulded plastic hermetic capsule (page 1, first paragraph; page 3, seventh paragraph; page 5, penultimate paragraph; and page 7, second and third full paragraph of E9a). Since E9a expressly mentioned that the motor and an input end of the permanent magnet coupling were enclosed in the hermetic capsule, it was implicit that a second rotor of the permanent magnet coupling was outside the hermetic capsule. There would have been no need for magnet coupling if both parts of the coupling had been located in the hermetic capsule. Moreover, Figures 1 and 2 of E9 showed a magnet coupled to reducer 5 and placed outside a first magnet. The first magnet was within a double-hatched area which represented the hermetic capsule. Sleeves 1 and 2 could not form any hermetic capsule as they were intended to rotate with respect to one another. This implied tolerances which would make it impossible to obtain a hermetic structure.

*Auxiliary request I - novelty over E9*

The subject-matter of claim 1 of auxiliary request I was not novel over E9. E9 disclosed first and second connection regions for attaching to bone (attached to

the extremities of sleeves 1 and 2 in Figure 1; page 4, last paragraph and page 7, first full paragraph of E9a). Figure 4 showed one of these two connection regions attached to bone and the other to a knee prosthesis. However, the two connection regions had been represented as identical in Figure 1, and the implantable device of E9 had been disclosed for the more general use of bone reconstruction (page 4, last sentence of E9a).

*Auxiliary request II*

No objection was maintained against the admittance of auxiliary request II into the proceedings. However, the subject-matter of claim 1 of auxiliary request II did not involve an inventive step. On page 12 of the opponent's statement of grounds of appeal, an objection of lack of inventive step had been raised against claim 2 of the request found allowable by the Opposition Division. This objection clearly applied to claim 1 of auxiliary request II without the need for any further substantiation. Hence, the objection of lack of inventive step against claim 1 of auxiliary request II should be admitted into the appeal proceedings.

- VI. The proprietor's arguments relevant to this decision may be summarised as follows.

*Admittance of E9 and E9a*

E9 and E9a should not be admitted into the appeal proceedings. There were no reasons why they could not have been filed earlier. The decision of the Opposition Division did not justify their admittance since E9 and E9a would have been relevant for the claims of the patent as granted too. It was not the purpose of the

appeal proceedings to open a new procedure. Moreover, E9 and E9a were difficult to understand, especially because the proprietor had chosen to file only a machine translation, and not *prima facie* relevant. E9 disclosed a knee prosthesis with a telescopic sleeve comprising two axial studs but did not explain where these studs were attached or that they were meant to attach to bone. It did not belong to the same technical field as the patent in suit. Moreover, E9 did not provide a clear disclosure of a drive unit completely enclosed in a hermetic capsule and a magnetic rotor outside the capsule.

*Main request - novelty over E9*

E9 did not deprive the subject-matter of claim 1 of the main request of novelty. It did not disclose a drive unit completely enclosed in a hermetic capsule and a magnetic rotor outside the capsule. Moreover, E9 did not disclose an implantable device as page 2, third paragraph of E9a mentioned a "non-invasive" prosthesis. The test for novelty was a strict one. To deprive a claimed feature of novelty, the prior art had to disclose this feature without any ambiguity. Figure 1 disclosed a construction with a motor that drove an input end of a reducer magnetically. However, from the figure, no driving unit enclosed in a hermetic capsule could be discerned. Moreover, E9, in particular the passage on page 3, seventh paragraph of E9a referred to by the opponent, did not say anything about a second rotor being outside the hermetic capsule. According to page 5, penultimate paragraph and page 8, fourth paragraph of E9a, the permanent magnet coupling as a whole, indicated with reference number 4 in Figure 1, could be included in a hermetic capsule. The hermetic capsule could not be identified without ambiguity in

the figures of E9. It could not be said with certainty that the area with double hatching in Figures 1 and 2 represented the hermetic capsule mentioned in the text of E9a. In any case, the whole permanent magnet coupling 4 was shown within that area in Figure 1. Moreover, sleeves 1 and 2 in Figure 1, possibly provided with a plastic film cover, could also build up the mentioned hermetic capsule. From E9, it could not even be discerned that the magnet coupling included a second rotor as claimed at all.

*Auxiliary request I - novelty over E9*

The subject-matter of claim 1 of auxiliary request I was novel over E9. E9 disclosed a cylinder which was part of an artificial knee prosthesis. The cylinder did not attach to the bone. Neither of the studs of the sleeves in Figure 1 of E9 was disclosed to be suitable for connection to bone. Figure 4 clearly showed that one of these studs was attached to an artificial joint resting on the tibial component of the knee articulation. At least this stud was not suitable for attaching to bone.

*Auxiliary request II*

The opponent had not raised any substantiated objection of lack of inventive step against claim 1 of auxiliary request II until the oral proceedings. The objection formulated on page 12 of the opponent's statement of grounds of appeal was directed to a claim which was different from claim 1 of auxiliary request II. Auxiliary request II had not even been filed yet. The opponent's objection of lack of inventive step had been filed late without any good reason and should not be admitted into the appeal proceedings.

### Reasons for the Decision

1. The patent

The patent is for an implantable device. According to claim 1 of auxiliary request II, this is an intramedullary distractor for the lengthening of long bones. An embodiment is depicted in Figure 1 of the patent, reproduced below.

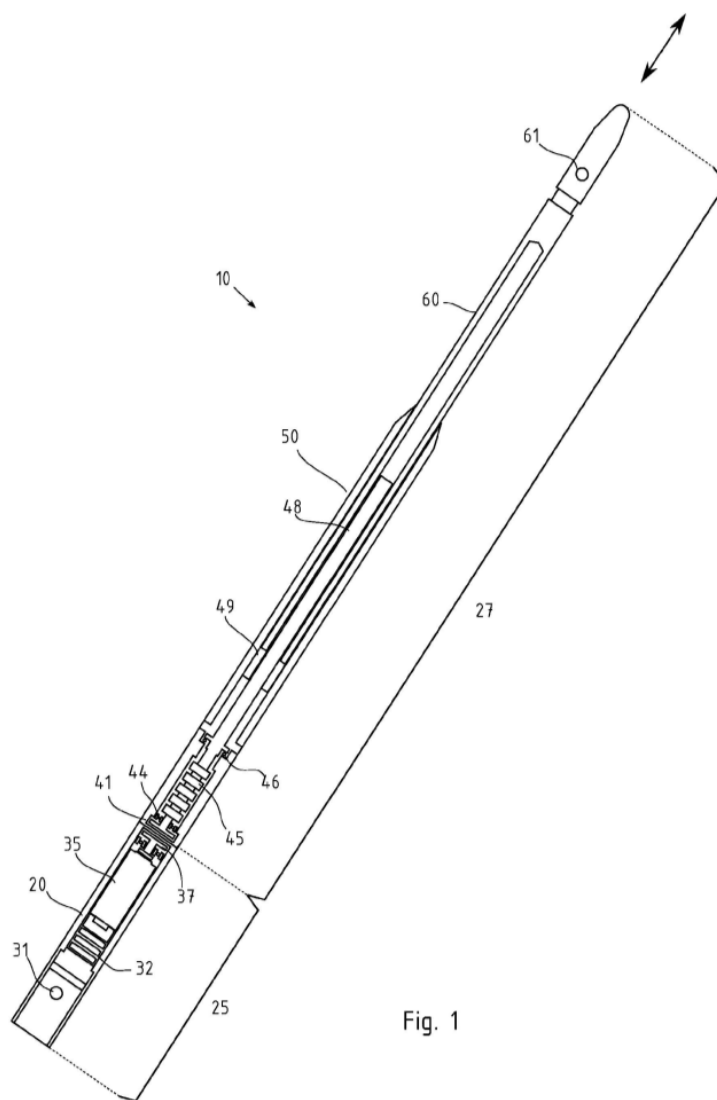


Fig. 1

The implantable device comprises a driving unit (25) and a kinematic assembly (27) joined together. The driving unit comprises an electric motor (35) driving a first magnetic rotor (37), and the kinematic assembly comprises a second magnetic rotor (41) magnetically coupled to the first magnetic rotor.

The implantable device further comprises an actuator driven by the second magnetic rotor. Due to the magnetic coupling between the first and the second magnetic rotors, the actuator can be rotationally driven by the motor.

The driving unit is enclosed in a hermetic capsule (20), whereas the second magnetic rotor is outside the hermetic capsule.

According to claim 1 of auxiliary requests I and II, first and second connection regions (31, 61) for attaching to bone are provided, and the actuator is arranged to generate a relative motion of the first and second connection regions.

The hermetic capsule prevents the ingress of body fluids into the driving unit, effectively preventing any contact between the component of the driving unit and body tissue. This should ensure the biocompatibility of the implant containing an electric motor (paragraphs [0004] and [0014] of the patent).

2. Admittance of E9 and E9a

E9 and E9a were filed with the opponent's statement of grounds of appeal, received on 9 July 2019.

Under Article 12(4) RPBA 2007, which applies by virtue

of Article 25(2) RPBA 2020, everything presented with the statement of grounds of appeal has to be taken into account by the Board if and to the extent it relates to the case under appeal and meets the requirements in Article 12(2) RPBA 2007. However, the Board may hold inadmissible facts, evidence or requests which could have been presented in the first-instance proceedings.

The opponent argued that E9 had been filed in response to the Opposition Division's decision. According to this decision, the then pending auxiliary request I met the requirements of the EPC. As noted in the Board's communication accompanying the summons to the oral proceedings, this request was filed only two months before the oral proceedings at first instance. Hence, contrary to the proprietor's arguments, the opponent's reaction to this request could not reasonably be expected earlier. The fact that E9 is also relevant for requests other than the one found allowable by the Opposition Division in the impugned decision does not necessarily mean that its submission cannot be considered a reaction to this decision.

In line with the established case law of the Boards, a further criterion to be considered for the admittance of late-filed facts and evidence is their *prima facie* relevance. E9 relates to extensible artificial prostheses for reconstructing bone defects, especially suitable for patients that are "immature in bones". These prostheses are adaptable to bone growth after prosthetic surgery (page 2, first three paragraphs of E9a). Hence, E9 is in the technical field of the patent in suit. Moreover, E9 clearly discloses a driving unit with a part of a magnetic coupling "completely isolated from the external environment" (page 3, seventh paragraph of E9a) by a plastic case and connection

regions at its extremities (at the extremities of sleeves 1 and 2, Figure 1). This is *prima facie* disclosure of important features of claim 1 of the request found allowable by the Opposition Division in the impugned decision.

Whether the quality of the English machine translation of E9, provided as E9a, could be better and might cause doubts about points of the disclosure of E9, as the proprietor observed, is a matter for the substantive assessment of this disclosure. The quality of E9a does not prejudice the general understanding of E9.

In view of these circumstances, the Board admits E9 and its English translation E9a into the appeal proceedings under Article 12(4) RPBA 2007.

3. Main request - novelty over E9

3.1 E9 discloses an implantable device in the form of an artificial extensible prosthesis (page 2, first three paragraphs of E9a), depicted in Figures 1 and 2 of E9 reproduced below.

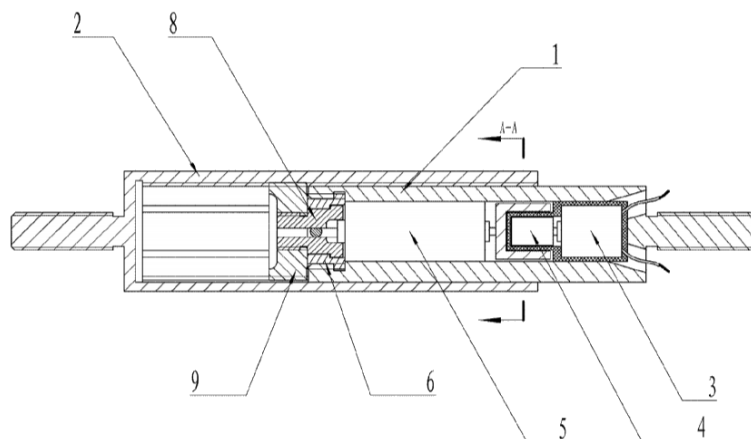
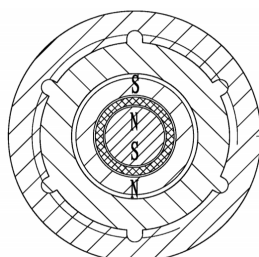


Fig 1



**Fig 2** A-A

The extensible prosthesis comprises a driving unit (motor 3 with its internal circuitry and input end of permanent magnet coupling 4) and a kinematic assembly (internal sleeve 1, external sleeve 2 and their interconnecting elements) joined together.

The driving unit comprises an electric motor (3) driving a first magnetic rotor (the input end of permanent magnet coupling 4, page 3, seventh paragraph of E9a). The kinematic assembly comprises a second magnetic rotor magnetically coupled to the first magnetic rotor (the output terminal permanent magnet of permanent magnet coupling 4, page 7, second full paragraph of E9a). An actuator of the kinematic assembly (outer sleeve 2) is driven by the second magnetic rotor which, in turn, can be rotationally driven by the motor due to the magnetic coupling between the first and the second magnetic rotors.

The driving unit is enclosed in a hermetic capsule (page 3, seventh paragraph and page 7, third full paragraph of E9a), whereas the second magnetic rotor is outside the hermetic capsule (page 7, second full paragraph of E9a).

Hence, E9 discloses all features of claim 1 of the main

request.

- 3.2 The proprietor argued that E9 did not disclose an implantable device because page 2, third paragraph of E9a mentioned a "non-invasive" prosthesis. However, as pointed out by the opponent, the expression "non-invasive" has a relative meaning in E9. It is used to distinguish the implantable prosthesis of E9 (shown as an implanted distal femur prosthesis 15 in Figure 4, for example), which does not require surgery for its extension, from prostheses which require multiple surgeries for the extension (page 2, first three paragraphs of E9a).

The proprietor also argued that E9 did not provide direct and unambiguous disclosure of a drive unit completely enclosed in a hermetic capsule. However, page 3, seventh paragraph and page 7, third full paragraph of E9a expressly describe that the motor and the input end of the permanent magnet coupling have a "plastic case" and are "completely isolated" from the external environment. Accordingly, Figures 1 and 2 of E9 show a double-hatched region enclosing motor 3 and a further component including a magnet, where the tip of arrow 4 points. This is direct and unambiguous disclosure of a hermetic capsule enclosing the driving unit.

The proprietor's argument that E9 did not disclose in a direct and unambiguous way a second magnetic rotor outside the hermetic capsule is not convincing either. First, as the opponent argued, it would make little technical sense to provide a hermetic capsule enclosing the whole magnetic coupling. Magnetic couplings are a standard solution for permitting the transmission of motion between an enclosed driver and an external

driven unit as they do not need physical contact between the driver and the driven unit. If the whole coupling can be placed in the same enclosure, the use of a direct mechanical coupling is more convenient because of its advantages in force transmission. Second, E9a specifically mentions "the motor" and "the input end of the permanent magnet coupling" as the elements provided in the hermetic capsule (page 3, seventh paragraph and page 7, third full paragraph). If the "output terminal permanent magnet of permanent magnet coupling" (page 7, second full paragraph) had been meant to be in the hermetic capsule too, the document would have mentioned it, or it would have at least not mentioned only the other component of the magnet coupling. Page 5, penultimate paragraph and page 8, fourth paragraph of E9a and Figure 1 of E9 referred to by the proprietor do not disclose the whole magnet coupling being included in the hermetic capsule. The paragraph on page 5 merely mentions the advantage of the permanent magnet coupling, which makes it possible to have "the motor and the internal circuit of the prosthesis" completely sealed. The second sentence of the fourth paragraph on page 8 states that "the permanent magnets of the motor 3 and the permanent magnet coupling 4" are wrapped by a plastic material. However, the first sentence of that paragraph refers to "the permanent magnet of the input end of the permanent magnet coupling 4", which is the magnet wrapped, together with the motor, by a plastic material in accordance with the above-cited following sentence. The arrow associated with reference sign 4 in Figure 1 of E9 points to a region not limited to only one side of the double-hatched element and in which the magnetic coupling as a whole is established. Finally, Figure 2 of E9 clearly shows two magnets separated by an element provided with a double hatching and extending all

around the motor and the magnet coupled to the motor. For these reasons, the person skilled in the art faced with the disclosure of E9 directly and unambiguously understands that a second magnetic element of the permanent magnet coupling 4 (the "output terminal permanent magnet of permanent magnet coupling 4" mentioned on page 7, second full paragraph of E9a) is placed outside the hermetic capsule. This second element is clearly a rotor as it causes the rotation and rotates with speed reducer 5 (page 7, second full paragraph and page 8, fourth paragraph of E9a).

3.3 In conclusion, E9 anticipates the subject-matter of claim 1 of the main request. Hence, the patent cannot be maintained on the basis of this request for lack of novelty (Article 54(1) and (2) EPC).

4. Auxiliary request I - novelty over E9

The subject-matter of claim 1 of auxiliary request I is not novel over E9. E9 discloses first and second connection regions for attaching to bone at the extremities of sleeves 1 and 2 in Figure 1.

The proprietor argued that these regions were not disclosed as being suitable for attaching to bone.

However, Figure 4 of E9 and the description of Figure 4 and the numbers in the figures on page 6 of E9a clearly disclose an embodiment of the extensible prosthesis with the upper extremity affixed to the femur. As the opponent pointed out, the connecting regions at the extremities of sleeves 1 and 2 in Figure 1 of E9 are represented as being identical. Moreover, the description of E9 explains that the extensible prosthesis is not limited to use as a knee prosthesis

but can be used for general bone reconstruction applications, some of which may not require the replacement of part of an articulation (page 4, last sentence of E9a). The person skilled in the art directly and unambiguously understands that for such general applications, not only one but both connecting regions at the extremities of sleeves 1 and 2 must be suitable for attachment to bone.

For these reasons, E9 anticipates the subject-matter of claim 1 of auxiliary request I. Hence, the patent cannot be maintained on the basis of this request owing to lack of novelty (Article 54(1) and (2) EPC).

5. Auxiliary request II

5.1 The opponent did not raise any substantiated objection of lack of inventive step against claim 1 of auxiliary request II until the oral proceedings. The Board even noted in its communication accompanying the summons to oral proceedings that no objection had been raised, to which the opponent did not react until the oral proceedings.

Page 12 of the opponent's statement of grounds of appeal, to which the opponent referred, contains an objection of lack of inventive step which refers to claim 2 of the request found allowable by the Opposition Division. However, this claim specifies an actuator in the form of a "leadscrew-nut distractor" or a "jack distractor". It does not define an intramedullary distractor for lengthening long bones as in claim 1 of auxiliary request II. Moreover, the objection lacks substantiation as the opponent merely affirmed that *"Die aus E9 bekannte Technologie bei unterschiedlichen Distraktoren einzusetzen, könnte*

*grundsätzlich keine erfinderische Tätigkeit begründen*" ("the application of the technology known from E9 to different distractors cannot justify, in principle, any inventive step" - translation provided by the Board). The opponent's argument that for such an objection there was no need for substantiation is a further mere allegation which would force the proprietor and the Board to speculate about why the teaching of E9 was more general than its disclosure.

Hence, the opponent's objection is an amendment of its case made only at the oral proceedings. Under Article 13(2) RPBA 2020, such an amendment must, as a rule, not be taken into account unless there are exceptional circumstances justified with cogent reasons by the opponent. No such reasons were provided. The Board sees no exceptional circumstances justifying the amendment and observes that at the latest the opponent should have explained the objection in reaction to the communication accompanying the summons to oral proceedings but chose not to.

For these reasons, the objection of lack of inventive step against auxiliary request II is not admitted into the appeal proceedings under Article 13(2) RPBA 2020.

- 5.2 The opponent raised no further objections to auxiliary request II. It did not object to the adapted description filed by the proprietor. The Board does not have objections either.

## Order

### For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the Opposition Division with the order to maintain the patent as amended in the following version:
  - claims 1 to 12 of auxiliary request II, filed with letter dated 25 November 2019
  - description pages 2 to 4 as filed at the oral proceedings before the Board
  - drawings of the patent specification

The Registrar:

The Chairman:



A. Chavinier-Tomsic

M. Alvazzi Delfrate

Decision electronically authenticated