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Datasheet for the decision of 24 February 2026

Case Number: T 0717/23 - 3.4.01

Application Number: 15169494.0

Publication Number: 2954844

IPC: A61N2/00

Language of the proceedings: EN

Title of invention:
CONTACTLESS ROTARY JOINT

Patent Proprietor:
Schleifring GmbH

Opponent:
Siemens Healthcare GmbH

Headword:
Contactless rotary joint / Schleifring

Relevant legal provisions:
EPC Art. 100(c), 52(1), 56, 76(1), 84, 123(2)
RPBA 2020 Art. 13(2)

Keyword:
Main request - extension of subject-matter - yes
Auxiliary requests 1 to 5 and 5a - extension of subject-matter - yes
Auxiliary request 6 - extension of subject-matter - no; lack of clarity - no; inventive step - yes
Admittance of late-filed objections - no
Objection of double patenting subject to Article 13(2) RPBA - yes

Decisions cited:
T 0458/22, T 2180/21, T 2907/19, G 0004/19, G 0003/14

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Case Number: T 0717/23 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 24 February 2026

Appellant: (Patent Proprietor)	Schleifring GmbH Maisacher Str. 144 82256 Fürstenfeldbruck (DE)
Representative:	Lohr, Jöstingmeier & Partner Patent- und Rechtsanwälte mbB Junkersstraße 3 82178 Puchheim/München (DE)
Appellant: (Opponent)	Siemens Healthcare GmbH Henkestraße 127 91052 Erlangen (DE)

Decision under appeal: **Interlocutory decision of the Opposition Division of the European Patent Office posted on 8 February 2023 concerning maintenance of the European Patent No. 2954844 in amended form.**

Composition of the Board:

Chair	P. Scriven
Members:	T. Petelski
	N. Obrovski

Summary of Facts and Submissions

I. The opposed patent resulted from the application published as EP 2 954 844 A1, which is a divisional of the parent application published as WO 2012/041554 A1.

II. This decision will refer to passages of these publications, whenever citing the "application as (originally) filed" or the "parent application as (originally) filed".

III. The Opposition Division found that the patent could not be maintained as granted due to the extension of subject-matter beyond both the application and the parent application as filed. Auxiliary Requests 1 and 2 failed for the same reasons. The Opposition Division did not admit Auxiliary Request 3 into the proceedings, but found that the patent could be maintained in amended form, based on Auxiliary Request 4.

IV. Both the proprietor and the opponent appealed this interlocutory decision.

V. The proprietor requested that the decision be set aside, and that the patent be maintained as granted or on the basis of one of eight auxiliary requests, wherein:

(a) Auxiliary Requests 1 and 5 were filed, for the first time, on appeal;

(b) Auxiliary Requests 2, 3, and 6 were filed during oral proceedings before the Opposition Division as (then) Auxiliary Requests 2, 1, and 4 (in that order), and were dealt with in the decision;

(c) Auxiliary Request 4 was filed during oral proceedings before the Opposition Division as (then) Auxiliary Request 3, but was not admitted into the proceedings;

(d) Auxiliary Request 5a was filed, for the first time, after replies to the appeals had been exchanged;

(e) Auxiliary Request 7 was filed in reply to the opponent's appeal.

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

VII. Both parties conditionally requested oral proceedings.

VIII. The Board informed the parties of its preliminary opinion, which was negative regarding the allowability or admittance of the Main Request and Auxiliary Requests 1 to 5a and 7, mainly due to the extension of subject-matter beyond the content of the parent application as filed. However, the Board's preliminary opinion was positive on the allowability of Auxiliary Request 6.

IX. In response to the Board's preliminary opinion, both parties extended their argumentation in writing and

during oral proceedings, while maintaining their requests as set out above.

X. During the oral proceedings, the opponent submitted three questions by means of an email, which is annexed to the minutes of the oral proceedings before the Board. Furthermore, with regard to Auxiliary Request 6, they requested that the proceedings be stayed until the Enlarged Board of Appeal decide on referral G 1/25, should the Board find that clarity was not subject to opposition-appeal proceedings, either in general or in the present case.

XI. This decision refers to the following documents:

D2: US 2007/0035883 A1
D7: US 2010/0148505 A1
D8: DE 84 29 531 U1

XII. Claims 1 and 14 of the patent read (reference signs omitted here and hereafter):

1. Rotary joint having a stationary and a rotating part, at least one of the parts comprising a rotary joint body of a plastic material, having at least one slip ring track,

the rotary joint body holding a capacitive data link, the capacitive data link having a data transmission line for contactless transmission of data, and the rotary joint body holding a rotating transformer magnetic

core for contactless transmission of electrical power,

said rotating transformer magnetic core having at least one winding,

characterized by

the said at least one part having a shield provided for shielding electrical and/or magnetic fields generated by the rotating transformer, to reduce interference with the capacitive data link and

the said at least one part having at least one slip ring track used for grounding by being connected to the shield.

14. Rotary joint for a CT scanner having a stationary and a rotating part, at least the rotating part comprising:

a rotary joint body of a plastic material, said body, having a free inner bore preferably for accommodating a patient, holding a capacitive data link, having a data transmission line, for contactless transmission of data, and holding a rotating transformer having a rotating transformer magnetic core, for contactless transmission of electrical power, having at least one winding;

the rotary joint being characterized by at least one shield being provided for shielding

electrical and/or magnetic fields generated by the rotating transformer, to reduce interference with the capacitive data link, and

by at least one shield having a higher thermal conductivity than the rotary joint body and adapted to help dissipating heat from the rotating transformer, said shield being thermally connected to the rotating transformer core.

XIII. The claims of Auxiliary Request 1 differ from those of the patent in that the features of claim 2 have been added to the end of claim 1 as a new characterizing part:

... [used for grounding by being connected to the shield],

characterized in, by the rotary joint body having a disk shape, and the rotating transformer magnetic core being held at one side of the disc, while a conducting backplane is mounted to the opposing side of the disc.

The remaining claims were maintained and renumbered accordingly.

XIV. The claims of Auxiliary Request 2 differ from those of the patent only in claim 1, as shown (amendments marked):

Rotary joint having a stationary and a rotating part, at least one of the parts comprising a rotary joint body of a plastic material, having a first slip ring track and a second slipring track ~~at least one slip ring track~~, and the corresponding secondary side rotary joint body does not have further slipring tracks but slipring brushes to interface with these tracks,

the rotary joint body holding ...

... capacitive data link and

the said at least one part having at least one of the slip ring tracks used for grounding by being connected to the shield.

XV. The claims of Auxiliary Request 3 differ from those of Auxiliary Request 2 only in claim 1, in which the first and second slip ring tracks "are provided for transferring auxiliary signals or standby power".

XVI. The claims of Auxiliary Request 4 differ from those of Auxiliary Request 2 only in claim 1, which reads (amendment marked):

...

the said at least one part having at least one of the slip ring tracks, they are used for grounding by being connected to the shield.

XVII. The claims of Auxiliary Request 5 differ from those of Auxiliary Request 2 only in claim 1, which reads (amendments marked):

> ...
>
> *the first slip ring track and a second slipring track are ~~the said at least one part having at least one of the slip ring tracks~~ used for grounding by being connected to the shield.*

XVIII. The claims of Auxiliary Request 5a differ from those of Auxiliary Request 5 only in claim 1, which reads (amendment marked):

> ...
>
> *the first slip ring track and ~~a~~ the second slipring track are used for grounding by being connected to the shield.*

XIX. In Auxiliary Request 6, claim 14 of the patent is the only one retained (and is renumbered as claim 1). Further, paragraphs 4, 11, 14, 23, and 27 to 30 of the description are as submitted during oral proceedings before the Opposition Division and annexed to the decision under appeal.

Reasons for the Decision

Main Request – extension of subject-matter

1. The end of claim 1 defines:

> *... the at least one* [of a stationary and a rotating] *part having at least one slip ring track used for grounding by being connected to the shield.*

2. The parent application, as filed, refers to slip ring tracks only in the description of Figure 2, specifically in the paragraph bridging pages 7 and 8, which reads in part:

> *Here an additional first slip ring track 131 and a second slip ring track 132 are provided for transferring auxiliary signals or standby power. They may be further used for grounding. ... There may be one or any other number of slipring [sic] tracks.*

The slip ring tracks 131 and 132 are shown in each of Figures 2 to 6. The claims of the parent application, as filed, do not mention slip ring tracks at all.

3. The proprietor argued that this passage provided a basis for the definition at the end of claim 1. There was no need to define the auxiliary signals or standby power in the claim, since those features were not linked to the grounding and since the claim did not exclude that the slip ring tracks could be used for the transmission of signals in addition to grounding.

4. Still according to the proprietor, the passage left open whether one or both of the slip ring tracks was used for grounding. The skilled person would understand that the pronoun "they", in the cited passage, referred to the slip ring tracks as set. This meant that, even if just one of two slip ring tracks actually transmitted the ground, it was still the set consisting of the two slip ring tracks that was used for grounding.

5. The proprietor's line of argument is not persuasive, because the skilled person would understand the cited passage in the following manner.

(a) The passage says that the use of the slip ring tracks for grounding is in addition to their primary use for transferring signals or standby power. This double use has technical consequences for the electrical configuration of the slip ring tracks and their connections. For example, it might require electronic components to combine and separate a (DC) ground from an (AC) data signal. Due to the inextricable link between the two uses of the slip ring tracks and the electrical configuration resulting therefrom, the person skilled in the art would not have derived, from the parent application, electronic configurations in which the slip ring tracks are used for grounding only. Hence, the intermediate generalisation ,in claim 1, of omitting the primary use of the slip ring tracks is not allowable.

(b) From a linguistic point of view, the pronoun "they" in the cited passage refers to the previously mentioned first and second slip ring tracks, which, in a normal understanding, means that each of the

first and second slip ring tracks is used for grounding. This understanding is also technically meaningful in that it makes sense to deliver the (DC) ground to the electronic components that receive the (AC) auxiliary signals or the standby power. Therefore, the definition in claim 1 that at least one slip ring track is used for grounding, but not necessarily all of them, constitutes an intermediate generalisation and has no basis in the parent application as filed, at least no unambiguous one.

6. Hence, the patent cannot be maintained as granted due to an extension of subject-matter beyond the content of the (earlier) parent application as filed in two aspects (Article 100(c) EPC).

Auxiliary Requests 1, 2, 3, 4, 5, 5a

7. Claim 1 of each of Auxiliary Requests 1, 2, and 3 defines the use of the at least one slip ring track for grounding, without defining its primary use for transferring auxiliary signals or standby power. Consequently, these claims contain at least the unallowable intermediate generalisation set out above, in point 5.(a).

8. Claim 1 of each of Auxiliary Requests 1, 2, 4, 5, and 5a defines the use of at least one slip ring track for grounding instead of all of them. Consequently, these claims contain at least the unallowable intermediate generalisation set out above, in point 5.(b).

9. The proprietor did not add anything to the arguments put forward with regard to the Main Request in response to these objections.

10. It follows that none of Auxiliary Requests 1, 2, 3, 4, 5, and 5a is allowable due to the extension of subject-matter beyond the content of the parent application as filed in at least one aspect that is identical to the Main Request (Article 76 EPC). In view of this conclusion, there is no need to address their admittance.

Auxiliary Request 6 - extension of subject-matter

11. Claim 1 is identical to claim 14 of the patent.

12. The opponent argued that, when applying the "gold standard", claim 1 extended beyond the content of the application as filed in the following five points.

(a) Omission of slip ring tracks: when considering the entire application as filed, the skilled person would have understood that the presence of slip ring tracks was not optional. Firstly, this was because slip ring tracks were defined in both independent claims. Secondly, it was because in the course of the examination and opposition proceedings, the proprietor had amended the description by labelling the only "embodiment" that did not show slip ring tracks as being part of the prior art, but not of the invention. Thirdly, it was because the application contained no statement to the effect that slip ring tracks were not required, and silence on the presence of slip ring tracks was no unambiguous disclosure of their

absence, all the more so since, in the latter case, the claims would no longer be supported. Lastly, it was because slip ring tracks were required for grounding the shield in order for the shield properly to perform its function of shielding electrical and/or magnetic fields.

This objection should be admitted because it had already been discussed during opposition proceedings and was maintained on appeal.

(b) Contactless rotary joint: the application as filed disclosed only a "contactless rotary joint". This was different from the presently claimed, more general, "rotary joint", even when considering that the rotary joint used contactless transmissions of data and power.

This objection should be admitted because it had already been raised during opposition proceedings.

(c) Number of shields: claim 1 covered two options for the shielding, namely that the functions of shielding electrical and/or magnetic fields and dissipating heat were performed by either two separate shields or one single shield. In contrast, the application as filed, in particular the embodiment of Figure 4, only disclosed a single shield performing both functions.

This objection should be admitted because it had been triggered by the Board's preliminary opinion on Auxiliary Requests 6 and 7 (points 82 and 100).

(d) Omission of cooling fin: paragraph [0014] of the application as filed disclosed the presence of at

least one cooling fin in a non-optional manner. Although paragraph [0030] mentioned the cooling fin as optional, the fact that the fin was illustrated in the respective Figure 4 meant that the fin formed part of that embodiment, regardless of the phrasing in the text. Furthermore, the proprietor had amended the description to exclude all embodiments without cooling fins.

This objection should be admitted because it had been raised during opposition proceedings and maintained on appeal.

(e) Free inner bore: according to claim 1, the body of the rotary joint for a CT scanner comprised "a free inner bore preferably for accommodating a patient". As the accommodation of a patient was optional, the free inner bore could well be smaller, as in CT scanner used for scanning luggage at an airport. In contrast, paragraph [0023] of the application as filed required the free inner bore to be configured for accommodating a patient if the rotary joint was that of a CT scanner.

This objection should be admitted because it was a mere supplementation of the argumentation provided by the proprietor in its letter dated 20 November 2025, concerning the question of whether D7 disclosed a CT scanner with a free inner bore.

13. The Board did not admit objections (b), (c), and (e) into the appeal proceedings. The objections (a) and (d) were admitted, but are not persuasive. The reasons are as follows:

(a) Omission of slip ring tracks: the opponent is right in that the rotary joint defined in the independent claims as filed has a shield and slip ring tracks. However, paragraphs [0010] to [0014] of the application as filed describe embodiments of the invention with at least one shield but without mentioning any slip ring tracks. The lack of a reference to slip ring tracks in these paragraphs supports the skilled person's technical understanding of the application as a whole, according to which the slip ring tracks merely provide an additional option for transmitting signals or standby power. In particular, the slip ring tracks are not linked to the shielding and heat dissipating functions of the shield. It is also not required that the shield be grounded by a connection to a slip ring track, as its grounding could be provided equally well otherwise. Hence, a rotary joint with a shield but without slip ring tracks can be derived from the application as filed. The opponent's argument referring to amendments to the description made during examination proceedings are of no relevance to the compliance of claim 1 with the requirement of Article 123(2) EPC.

(b) Contactless rotary joint: in appeal proceedings, this objection was raised, for the first time, after notification of the Board's communication under Article 15(1) RPBA. Therefore, raising this objection constitutes an amendment to the opponent's appeal case, the admittance of which is governed by Article 13(2) RPBA, regardless of whether the objection was discussed during opposition proceedings. As there are no exceptional circumstances that would justify the late filing,

in particular considering that claim 1 is identical to claim 14 of the patent, this attack is not taken into account. Furthermore, the attack is *prima facie* not persuasive, either, as a rotary joint that only comprises contactless transmission lines is inherently a "contactless rotary joint". The Board also notes that, according to the original disclosure, a "contactless rotary joint" may comprise a contacting transmission line in the form of slip ring tracks and brushes, which has the consequence that the skilled person would not attribute a more specific meaning to "contactless rotary joint" than to a rotary joint with contactless signal and standby power transmission lines.

(c) Number of shields: this objection was raised, for the first time, during the oral proceedings before the Board. Therefore, it also constitutes an amendment to the opponent's appeal case, the admittance of which is governed by Article 13(2) RPBA. The Board does not accept the argument that this attack was triggered by its preliminary opinion. The opponent had been aware, long before, that claim 1 could be interpreted in two different ways. Indeed, they referred to them as the "two-shield interpretation" and the "single-shield interpretation", in their own statement of grounds of appeal. Nevertheless, the opponent had never before used these interpretations in the context of an objection of added subject-matter. Furthermore, the Board's preliminary opinion, according to which the application as filed lacked a specific disclosure of a single shield used for shielding electric and/or magnetic fields and also for dissipating heat, does not imply that the

application lacks a general disclosure that left open the number of shields used for performing the two functions. As there are no exceptional circumstances justifying the late filing, this objection is not taken into account, either.

(d) Omission of cooling fin: paragraph [0030] of the application as filed, and claims 7 to 9 as filed, define the cooling fin as an optional element of the heat dissipating shield, and the thermal connection to the rotating transformer core as another optional element (see claims 7 to 5 of the parent application as filed). The skilled person understands that the fin increases the dissipation of heat from the shield to the environment, whereas the thermal connection has the different effect of increasing the heat conduction from the transformer to the shield. Therefore, either option can be applied with or without the other. Against this background, paragraph [0014] has to be understood accordingly. Hence, there is sufficient disclosure in the application and parent application as filed for a heat dissipating shield, which is thermally connected to the rotating transformer core, and which does not have a cooling fin.

(e) Free inner bore: the opponent's line of argument regarding the preferred suitability of the free inner bore for a patient was raised, for the first time, after notification of the Board's communication under Article 15(1) RPBA. Therefore, it also constitutes an amendment to the opponent's appeal case, the admittance of which is governed by Article 13(2) RPBA. The Board does not accept the opponent's argument that the objection was a mere supplement to the discussion on CT scanners in the

proprietor's letter dated 20 November 2025. Firstly, the discussion referred to by the opponent concerned inventive step, specifically whether D7 disclosed a CT scanner with a free inner bore and preferably for a patient. This discussion had already taken place during opposition proceedings (see points 73 to 75 of the decision) and was also referred to in the proprietor's statement of grounds of appeal (page 2, relating to features 14.1 and 14.2.2). Therefore, the opponent's argument regarding added subject-matter could and should have been submitted earlier, and there are no exceptional circumstances that justify the late filing. In addition, the argument is, prima facie, not persuasive, as the suitability for accommodating a patient does not restrict the size of the CT scanner's inner opening, considering that a patient encompasses a broad range of animals.

14. The opponent also raised the same objections with regard to the parent application as filed. However, as the description is, in all relevant passages, identical to that of the application as filed, the same reasoning applies.

15. In consequence, Articles 76(1) and 123(2) EPC do not prejudice the maintenance of the patent on the basis of Auxiliary Request 6.

Double patenting

16. In oral proceedings before the Board, the opponent raised, for the first time in the appeal proceedings, an objection of double patenting.

17. The opponent submitted why, in their view, the scope of claim 1 was identical, at least in part, to that of the patent that resulted from the parent application. In line with the prohibition of double patenting, the proprietor should not be allowed to request a patent based on the same subject-matter as that of the granted parent application, even if, as here, the patent resulting from the parent application had later been revoked.

18. In the present case, the Examining Division had initially considered the subject-matter of claim 1, which is identical with claim 14 of the patent, to be different from claim 1 of the parent, and, for that reason, in compliance with the prohibition of double patenting. The Examining Division found the difference to be due to the rotary joint, in present claim 1, not being contactless. However, since the Board interpreted the rotary joint as a contactless rotary joint, there was in fact no difference from the claims of the parent. In such a situation, it had to be possible to address the prohibition of double patenting in appeal proceedings. In any case, the proprietor had no legitimate interest in pursuing the same subject-matter a second time.

19. The opponent added that the issue of double patenting was a formal one that had to be assessed at any time during the appeal proceedings. This constituted exceptional circumstances, within the meaning of Article 13(2) RPBA.

20. In support of their objection of double patenting, the opponent submitted the following three questions to the Board (translated from the German original, which is attached to the minutes):

1. Can a subsequently granted European patent granted be revoked in opposition proceedings under Article 101(2) EPC, or in opposition appeal proceedings under Article 111(1) EPC, if it claims the same subject-matter as a European patent granted earlier to the same patent proprietor, which does not form part of the state of the art under Article 54(2) and (3) EPC?

2.1 If the first question is answered in the affirmative, what are the conditions for such revocation, in particular taking into account the fate of the earlier granted patent as a result of subsequent opposition proceedings, and do different conditions apply depending on whether the later granted patent assumed the version claiming the same subject matter as in the earlier granted patent during
a) the grant proceedings of the later-granted patent or
b) the opposition proceedings of the later-granted patent?

2.2 In the first case mentioned in 2.1a), in particular, does a patent proprietor have a legitimate interest in the maintenance of the later patent if the Examining Division wanted to ensure compliance with the prohibition of double patenting by requiring changes to the subject-matter, which the patent proprietor nevertheless does not want to adhere to in substance in the opposition proceedings,

for example in the case of interpretation in accordance with G 1/24?

21. The opponent stated that they wanted the present Board to decide on these questions, in the context of their objection of double patenting, and did not make a request for their referral to the Enlarged Board of Appeal.

22. For the following reasons, the Board did not admit the objection of double patenting into the appeal proceedings, under Article 13(2) RPBA.

23. Raising an objection of double patenting for the first time in the oral proceedings before the Board constitutes an amendment of the opponent's appeal case within the meaning of Article 13(2) RPBA. Contrary to the opponent's allegation, such an objection is not be treated differently from any other new objection, raised for the first time at such a late stage. The Board notes, in this context, that, for example, an objection as to the admissibility of the appeal also qualifies as an amendment within the meaning of Article 13(2) RPBA (see T 458/22, Reasons 1.5 and 1.6; and T 2180/21, Reasons 1 to 1.4).

24. If anything, it is questionable whether an objection of double patenting can be examined in opposition or opposition appeal proceedings at all. In G 4/19, OJ EPO 2022, A24, the Enlarged Board did not address opposition proceedings (see G 4/19, Reasons 4) and based the applicability of the prohibition of double patenting in examination proceedings on Articles 97(2) and 125 EPC, referring to the preparatory documents to the EPC and the legislator's intention. As Article 97(2) EPC is not applicable in opposition proceedings

and as Article 100 EPC provides an exhaustive enumeration of grounds for opposition which does not include double patenting, it seems that the Enlarged Board's reasoning cannot simply be extended to opposition proceedings. In the present case, however, this question can be left open.

25. In particular, apart from arguing that an objection of double patenting could per se not be late-filed, which is incorrect, the opponent did not provide any reasons as to why there were exceptional circumstances justifying the admittance of the objection of double patenting at such a late stage of the appeal proceedings. Considering that claim 1 is identical to claim 14 of the patent, the objection should, if at all possible, have already been raised earlier during the appeal proceedings.

26. Furthermore, the objection is, prima facie, not persuasive. Firstly, the issue of double patenting does not even arise in the present case, because the patent resulting from the parent application has been revoked. Under Article 68 EPC, the effect of that revocation is that the revoked patent is deemed not to have had, from the outset, the effects specified in Articles 64 and 67 EPC. Secondly, the subject-matter which, according to the opponent, is allegedly subject to the prohibition of double patenting, only concerns - the claims in question not being identical due to semantically significant comma placements - at the very most claims with an overlapping scope rather than double patenting in the narrower sense (as to this distinction, see G 4/19, Reasons 2; see also T 2907/19, Reasons 12.2).

27. The objection of double patenting not having been admitted into the appeal proceedings, there is no need to answer the opponent's three questions.

Auxiliary Request 6 - Article 84 EPC

28. During the written appeal proceedings, the opponent argued that there was a contradiction between the amended description and claim 1, because the former did not disclose two separate shields, whereas the latter defined precisely that. Hence, Article 84 EPC was violated.

29. Furthermore, according to the amended description, the embodiments of Figures 4 and 6 were covered by the invention defined in claim 1, whereas Figure 5 was not. However, Figure 5 showed a functionally similar shielding to that in Figures 4 and 6. Hence, either all of Figures 4, 5, and 6 should be covered by the invention, or none. This inconsistency rendered the subject-matter of claim 1 unclear.

30. The opponent also requested that the proceedings be stayed until the Enlarged Board of Appeal had decided on the referral G 1/25 regarding the adaptation of the description, should the Board find that clarity was not subject to opposition-appeal proceedings in general or in this case.

31. Although the opponent did not take up these arguments during the oral proceedings before the Board, they did not abandon them. Hence, the Board will address them.

32. The opponent's arguments are based on the assumption that claim 1 defined the use of separate shields for

shielding electrical and/or magnetic fields and for dissipating heat. However, as the Board already noted in its preliminary opinion (see points 81 and 82), claim 1 neither defines nor excludes that the shields performing the two different functions have to be the same shield. This means that the embodiment of Figure 4 is covered by the subject-matter of claim 1, and no contradiction is present.

33. Claim 1 is identical to claim 14 of the patent, which is why, considering the claim alone, any potential issues under Article 84 EPC are not caused by amendments, and cannot be examined in opposition-appeal proceedings (G 3/14 OJ EPO 2015, A102).

34. The Board also fails to see a problem under Article 84 EPC that is caused by the amendments to the description, in particular by the exclusion of Figure 5. The fact that the embodiment of Figure 5 was excluded from falling under the invention, whereas the similar embodiment of Figure 6 was not, might at most cause a perceived inconsistency within the description itself. However, it would not change the skilled person's understanding of claim 1, and neither favour a claim interpretation of a single shield with two functions, as shown in Figures 4 and 6, nor an interpretation with two shields with one function each, which the application also does not exclude. Rather, the application refers to the presence of "at least one shield" in paragraphs [0011] and [0014].

35. Consequently, there are no amendments that give rise to issues under Article 84 EPC.

36. Since the Board's finding does not depend on whether an amendment to the description can create clarity issues

in a claim that is clear on its own, the outcome of the referral G 1/25 is irrelevant for the present case, and there is no reason to stay the proceedings.

Auxiliary Request 6 - inventive step

37. D7 discloses a transformer for contactless transmission of both high power and data between a stationary and a rotating part ([0001], [0014]). The basic design of the contactless power and signal transmissions is expressly suited to being employed in computer-aided tomography scanners ([0016], [0032], [0033], [0036]). Hence, although the Figures 1 to 6 only illustrate an employment in the rotary joint of a wind turbine, the description of the transmission systems applies equally for its employment in the rotary joint of a computed tomography scanner with a free inner bore.

38. The heat generated in the current-bearing windings (14, 16 in Figure 2a) of the rotating transformer of D7 is channelled to the atmosphere through the epoxy resin 34 in which they are embedded (see Figure 5), through the surrounding ferrite cores 24, and through the rotor and stator bodies (12, 18; see [0053]). Those bodies need to be made of materials with low magnetic reluctance. The invention does not use the typical materials used in the prior art, which do not work properly at high temperatures ([0052]), but, instead ([0053]), uses the same epoxy resin that is used to coat the windings: "The inventors have found that high thermal conductivity epoxy resins allow the construction of a rotor with ..." ([0060]). Since epoxy resin is a plastic, the rotor and stator bodies are made of plastic material.

39. The subject-matter of claim 1 differs from D7 in the following features:

(a) The contactless data transmission line being part of a capacitive data link. D7 only discloses "the exchange of electro-static, magnetic, radio, infra-red, or visible-light signals" ([0035]). The "electro-static" data link would not necessarily be understood to be a capacitive data link.

(b) At least one shield for shielding electrical and/or magnetic fields generated by the rotating transformer, to reduce interference with a capacitive data link. D7 does not disclose any dedicated shield, the only field affecting element being the cores 24 (see Figure 2a), which channel the magnetic fields for an effective coupling (paragraphs [0042] and [0053]).

(a) At least one shield having a higher thermal conductivity than the rotary joint body and adapted to help dissipate heat from the rotating transformer, said shield being thermally connected to the rotating transformer core. In D7, the heat is dissipated to the ambient atmosphere through the high thermal conductivity resin that constitutes the entire body, apart from the windings and the cores (see paragraphs [0052], [0053] and [0059] - [0061]).

40. The technical effects of differences (a) and (b) are linked in so far, as the shielding is beneficial only for electrical or magnetic data links. Considering that the main embodiments in D7 use infra-red light for transmitting the data signals ([0035], [0064]), the common problem starting from those embodiments lies in

finding an alternative and equally reliable way of signal transmission.

41. The separate problem related to difference (c) lies in improving heat dissipation.

42. According to the opponent, a capacitive data link would have been one of few obvious options the skilled person would have considered for data transmission, based on their common technical knowledge alone. Alternatively, they would have resorted to D2, which disclosed capacitive data transmission in a CT scanner.

43. Further according to the opponent, improving heat dissipation would have been an intrinsic motivation for the skilled person, starting from D7. It would have been an obvious and well-known measure to add cooling fins to the rotor, the stator, or both, of the CT scanner in D7. Such cooling fins were usually made of metal, which had a higher thermal conductivity than resin. Due to the metallic composition and placement of the cooling fins on the surface of the stator or rotor, they would inherently have acted as a shield for electrical and/or magnetic fields in the same way as the shield in Figure 4 of the patent in suit.

44. Accordingly, the solution to the heat dissipation problem would have led to a shield in the form of cooling fins that performed the two functions of heat dissipation and shielding of electrical and/or magnetic field. Alternatively, rather than resorting to common technical knowledge, the skilled person would also have adopted the concept of cooling fins from D8 for the rotary joint of D7.

45. By solving these two unrelated problems, the skilled person would, therefore, have arrived at the subject-matter of claim 1 in an obvious way.

46. The Board acknowledges that the concepts of cooling fins and capacitive data links are part of the common general knowledge of the skilled person. However, the Board is not persuaded that the skilled person would have actually foreseen them for use in D7 in a way that would have led to the subject-matter of claim 1.

47. The high-power transmission in D7 (see [0032]) implies the presence of large electro-magnetic stray fields. Consequently, due to their immunity to stray fields, there would have been little motivation, for the skilled person, to abandon the optical data links used in the preferred embodiments, and even less motivation to deviate from the alternatives listed in paragraph [0035] in favour of a capacitive data link, which is particularly susceptible to such stray fields.

48. With regard to the heat dissipation, the skilled person might well have considered adding heating fins to the rotor, the stator, or both, in D7. The fins would have been most efficient if they were placed close to the heat source, namely, above and below the transformer coils and their surrounding cores, at the radially outward portions of the stator and rotor in Figures 2a and 6 of D7. Such a placement would, however, not have contribute to shielding the data link, even if the fins were made of metal. In addition, the fact that the fins were separate small metal elements would have also prevented their functioning as a shield. In the embodiment of Figure 4 of the patent in suit, it was not primarily the fins, but rather the large metal backplane into which the fins were integrated, which

was responsible for the shielding effect (see paragraph [0028] of the patent in suit).

49. Furthermore, the fins would not necessarily have been made of metal. Since the stator and rotor in D7 are made of a resin with a high thermal conductivity, it would have been easiest simply to mould them into shapes comprising fins of the same material.

50. It follows that neither the choice of a capacitive data link, nor the provision of cooling fins that shielded the data link from stay fields, nor both in combination, would have been obvious to the skilled person starting from D7, with or without consideration of D2 and D8. Accordingly, the Opposition Division was right in finding that the subject-matter of the single claim of Auxiliary Request 6 involved an inventive step (Articles 52(1) and 56 EPC).

Conclusion

51. The patent as granted (Main Request) is not allowable due to an extension of subject-matter beyond the content of the parent application as filed, in two aspects (Article 100(c) EPC).

52. Regardless of admittance, none of the Auxiliary Requests 1, 2, 3, 4, 5, and 5a is allowable due to the extension of subject-matter beyond the content of the parent application as filed, in at least one aspect that is identical to the Main Request (Article 76 EPC).

53. None of the opponent's objections prejudices the maintenance of the patent in amended form according to Auxiliary Request 6.

Order

For these reasons it is decided that:

The appeals are dismissed.

The Registrar: The Chair:

D. Meyfarth P. Scriven

Decision electronically authenticated