

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 14 January 2025**

Case Number: T 0721/23 - 3.4.02

Application Number: 11786345.6

Publication Number: 2576271

IPC: B60L3/00, H02K5/16, B60L15/20,
H02K11/40, H02K7/116,
F16H57/02, F16H3/091, B60L50/60

Language of the proceedings: EN

Title of invention:
Power transmission device for electric vehicle

Patent Proprietor:
NISSAN MOTOR CO., LTD.

Opponent:
ZF Friedrichshafen AG

Relevant legal provisions:
EPC Art. 100(c), 123(2)

Keyword:
Grounds for opposition - subject-matter extends beyond content
of earlier application (yes)
Amendments - extension beyond the content of the application
as filed - auxiliary requests 1 to 6 (yes)



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0

Case Number: T 0721/23 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 14 January 2025

Appellant: NISSAN MOTOR CO., LTD.
(Patent Proprietor) 2 Takara-cho
Kanagawa-ku
Yokohama-shi, Kanagawa 221-0023 (JP)

Representative: Hoefler & Partner Patentanwälte mbB
Pilgersheimer Straße 20
81543 München (DE)

Respondent: ZF Friedrichshafen AG
(Opponent) Löwentaler Straße 20
88046 Friedrichshafen (DE)

Representative: ZF Friedrichshafen AG
Gewerblicher Rechtsschutz
Löwentaler Straße 20
88046 Friedrichshafen (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 9 February 2023
revoking European patent No. 2576271 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman F. Giesen
Members: H. Bronold
C. Almberg

Summary of Facts and Submissions

- I. The appeal of the patent proprietor (appellant) is against the decision of the opposition division revoking European patent No. 2 576 271.
- II. The proprietor requested that the appealed decision be set aside and that the opposition be rejected (i.e. that the patent be maintained as granted). In the alternative, the proprietor requested that the appealed decision be set aside and that the patent be maintained as amended based on the claims of one of auxiliary requests 1 to 6, all filed with the statement setting out the grounds of appeal.
- III. In their statement setting out the grounds of appeal the proprietor argued with respect to novelty and inventive step regarding the main request, to admittance and inventive step regarding auxiliary requests 1 and 2, to inventive step regarding auxiliary request 3, as well as to the admittance of auxiliary requests 4 to 6. No arguments were presented regarding the objections under Article 100(c) EPC and Article 123(2) EPC which were discussed during the first instance proceedings.
- IV. The opponent (respondent) requested that the appeal be dismissed (i.e. that the patent be revoked).
- V. In their reply to the proprietor's statement of grounds of appeal the opponent repeated their objections under Article 100(c) EPC against the granted patent.
- VI. In a communication under Article 15(1) RPBA the Board informed the parties about its preliminary opinion,

inter alia, that Article 100(c) EPC prejudiced the maintenance of the patent as granted and that for the same reasons auxiliary requests 1 to 6 seemed to contravene Article 123(2) EPC.

- VII. The proprietor neither replied to the opponent's reply to the appeal nor to the Board's communication under Article 15(1) RPBA. Consequently, there are no written arguments of the proprietor with respect to the objections of the opponent under Article 100(c) EPC and Article 123(2) EPC on file.
- VIII. Oral proceedings were held before the Board on 14 January 2025.
- IX. Claim 1 of the main request (patent as granted) comprises the following passage, in which the last amendments made during the examination proceedings are indicated (additions underlined, deletions struck-through):
- "a grounding path (5) electrically connecting a ~~part~~ of connection point (CP) on the gear set (3;23;33) with a body of the vehicle, the ~~part~~connection point (CP) being so disposed as to have the input shaft (3b;23b) electrically interposed between the ~~part~~connection point (CP) and the rotor shaft (1b) to increase an electric resistance there between."
- X. Dependent claim 2 according to all auxiliary requests 1 to 6 also comprises the expression "part".
- XI. Claim 1 according to auxiliary requests 2, 3, 5 and 6 all comprise the passage cited in point IX above.

XII. Claim 1 of auxiliary request 4 comprises *inter alia* the following additional features relevant to the passage cited in point IX above:

"a brush (5a) in slidable contact with one selected from the group consisting of the input shaft (3b;23b), the counter shafts (3c;23c,23d) and the output shaft (3d;23d) and connected with the grounding path (5) so as to electrically connect the part of the gear set (3;23;33) with the body of the vehicle."

XIII. The parties' arguments, as far as they are relevant for the decision, are dealt with below together with the reasons for the decision.

Reasons for the Decision

Main request - Article 100(c) EPC

1. Claim 1 according to the main request extends beyond the content of the application as filed.
2. During the examination proceedings, the originally disclosed expression "part of the gear set" in claim 1 as filed was replaced with "connection point on the gear set".
3. The proprietor argued that the disputed amendment was allowable because for the person skilled in the art there existed no technical difference between the two expressions "part of the gear set" and "connection point on the gear set". Both referred to the grounding path which was also defined in claim 1. Further, the original specification contained two examples of providing the connection for the grounding path. The first expression was disclosed in paragraph [0026] of the published international application (see WO 2011/148642 A1) and specified that the connection point was where the brush connected to the gear set. The second expression was disclosed in paragraph [0047] of the published international application and specified that a connection member was foreseen at the gear set. With a mind willing to understand it was evident for the person skilled in the art that despite the different wording there existed no technical difference between the two expressions "part of the gear set" and "connection point on the gear set". It was further evident that both expressions meant an electrical

connection to the gear set. Further, in the description, "part of the gear set" and "connection point" were used in an equivalent manner. From paragraph [0026] it followed that the connection point was where the brush contacted with any part of the power transmission device. It was also clear that "connection point" merely referred to the electrical connection of the grounding path at the gear set and contained no definition of the location of the electrical connection. Further, according to the proprietor, it also followed from paragraph [0029] of the published international application that the connection point was where the brush made contact. Likewise according to paragraph [0048] of the published international application the connection member was defined to establish contact, which was equivalent for the person skilled in the art.

4. The Board is not convinced by the proprietor's arguments.
5. Firstly, the Board agrees with the opponent that the omission of the "brush", which is described in paragraph [0026] of the published international application and disclosed there together with the "connection point", extends beyond the content of the application as filed. A "connection point" instead of a "part" is only disclosed together with a "brush" in the application as filed. This becomes clear already from the first sentence of paragraph [0026] starting with "If a brush is provided and grounded...". The second sentence further makes clear that the connection point is defined by the point "where the brush contacts ...".
6. Obviously, claim 1 according to the main request does not contain a feature directed to the brush mentioned

in paragraph [0026]. Since the brush is the part establishing the electric contact, it is further inextricably linked to the feature "connection point" of paragraph [0026]. Its omission therefore constitutes an impermissible intermediate generalisation.

Already for this reason, claim 1 according to the main request contains added subject-matter.

7. Secondly, contrary to the proprietor's arguments, the two terms "part" and "connection point" cannot be regarded as synonyms or equivalents. They are disclosed in the application as filed in different contexts. According to paragraph [0026], the "connection point" is "where the brush contacts..." (emphasis added by the Board). The corresponding argument of the proprietor that the location of the "connection point" was not limited to any specific part of the gear set because paragraph [0026] defined the contact to be "with any part of the power transmission device" does not convince the Board. The adverb "where" is most commonly used to define a location or position and it is neither evident to the Board nor has the proprietor argued that the use of "where" in paragraph [0026] differed from its common meaning. Furthermore, the cited passage describes a structural connection to a part of the gear set rather than merely a functional description of an electrical connection.

8. The Board notes that the further part of disclosure identified by the proprietor in paragraph [0029] of the published international application describes the drawbacks of the prior art when contacting a rotor shaft with a brush. The connection point according to claim 1 is however defined with respect to the input shaft. Therefore, the content of paragraph [0029] is of

no relevance to the specific question as to whether "part of the gear set" is equivalent to "connection point on the gear set".

9. The proprietor's arguments directed to paragraphs [0047] and [0048] of the published international application and the corresponding reasons provided by the opposition division in the contested decision under points 9.4.3 and 9.5 do not convince the board either. The piece of disclosure referred to by the opposition division under 9.4.3 explicitly mentions a "connection member 5f" as being connected to the ring gear of a planetary gear set, all of which was not added to the wording of claim 1. Notwithstanding the fact that paragraphs [0047] and [0048] of the published international application cited by the opposition division in this context do not even mention a "connection point", the Board is also not convinced that in case of the third embodiment, merely "different nomenclature" is used. The concepts of contacting are completely different. The connection point referring to the brush denotes a variable location where the revolving shaft touches the brush whereas the connection member 5f can be fixed rigidly to the ring gear of the planetary gear set according to the third embodiment.
10. Consequently, the Board concluded that the ground for opposition according to Article 100(c) EPC prejudices the maintenance of the patent as granted.

Auxiliary request 4 - Article 123(2) EPC

11. With respect to auxiliary request 4, the proprietor argued that claim 1 according to auxiliary request 4

overcame the objection under Article 100(c) EPC against claim 1 according to the main request. The additional feature reintroduced the wording of granted claim 4 which corresponded to the disclosure in paragraph [0026] of the granted patent (identical to paragraph [0026] of the published international application). It was evident that the brush defined in claim 1 according to auxiliary request 4 established the connection to the part of the gear set required for the grounding path which defined the connection point.

12. The Board disagrees. While it is correct that the additional features in claim 1 according to auxiliary request 4 reintroduce the term "part of the gear set" as such, the wording of claim 1 implies that the "part of the gear set" is different from the "connection point". This is because claim 1 of auxiliary request 4 defines that the brush can be in slidable contact with the input shaft whereas the "connection point" is so disposed as to have the input shaft electrically interposed between the connection point (CP) and the rotor shaft (1b). The latter part expresses that the connection point is not on the input shaft. There is no original disclosure of an arrangement of a brush contacting a part of the gear set and a further connection point for the grounding path.

13. The Board notes that the "connection point" according to claim 1 is defined to

"being so disposed as to have the input shaft (3b;23b) electrically interposed between the connection point (CP) and the rotor shaft"

The additional feature in claim 1 however defines

"a brush (5a) in slidable contact with one selected from the group consisting of the input shaft (3b;23b), the counter shafts (3c;23c,23d) and the output shaft (3d;23d) and connected with the grounding path (5)".

14. The above definition of the brush in the additional feature lacks any information about whether the connection point defined in claim 1 is where the brush connects, as originally disclosed in paragraph [0026]. According to claim 1 the input shaft is electrically interposed between the connection point and the rotor shaft. This condition can however not be fulfilled if, as defined in the first-mentioned alternative of the additional feature of claim 1, the brush is at the same time in slidable contact with the input shaft. Regarding the other two alternatives mentioned in claim 1, the counter shafts and the output shaft, it is not apparent to the Board how a brush connecting to one of these elements would contribute any technical information regarding the input shaft being electrically interposed between the connection point and the rotor shaft either. Thus, the application as filed does not provide any disclosure that the terms "part of the gear set" and "connection point on the gear set" are synonyms or equivalents and can be mutually exchanged.

15. Consequently, the Board concludes that claim 1 according to auxiliary request 4 extends beyond the content of the application as filed (Article 123(2) EPC). Therefore, auxiliary request 4 is not allowable either.

Auxiliary requests 1 to 3, 5 and 6 - Article 123(2) EPC

16. In its communication under Article 15(1) EPC and during the oral proceedings before it the Board had already indicated that it considered the objection against claim 1 according to the main request to apply *mutatis mutandis* to claim 1 according to auxiliary requests 1 to 3, 5 and 6.
17. The proprietor neither replied to the Board's communication under Article 15(1) RPBA nor argued against the Board's preliminary opinion in this context during the oral proceedings. The Board also sees no reason to deviate from its preliminary opinion.
18. Therefore, the Board concludes that the objection under Article 100(c) EPC against claim 1 according to the main request applies *mutatis mutandis* under Article 123(2) EPC to claim 1 according to each of auxiliary requests 1 to 3, 5 and 6.
19. Consequently, none of auxiliary requests 1 to 3, 5 and 6 is allowable either, regardless of the question of admittance of these requests.

Conclusion

20. Since there is no allowable request of the proprietor on file, the Board accedes to the opponent's request.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



S. Lichtenvort

F. Giesen

Decision electronically authenticated