

Internal distribution code:

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

**Datasheet for the decision
of 6 June 2013**

Case Number: T 1604/11 - 3.2.08

Application Number: 04024394.1

Publication Number: 1496276

IPC: F16C 11/06, B61F 5/16

Language of the proceedings: EN

Title of invention:
A thrust bearing

Patent Proprietor:
Minebea Co. Ltd.

Opponent:
Schaeffler KG

Headword:
-

Relevant legal provisions:
EPC Art. 100(a), 54, 56

Keyword:
-

Decisions cited:
G 0001/95

Catchword:
-



Case Number: T 1604/11 - 3.2.08

D E C I S I O N
of the Technical Board of Appeal 3.2.08
of 6 June 2013

Appellant: Schaeffler KG
(Opponent) Industriestrasse 1-3
DE-91074 Herzogenaurach (DE)

Representative: Schaeffler Technologies GmbH & Co. KG
ST/SWE-GI
Postfach 12 60
DE-97419 Schweinfurt (DE)

Respondent: Minebea Co. Ltd.
(Patent Proprietor) 4106-73 Oaza Miyota,
Miyota-machi
Kitasaku-gun,
Nagano 389-0293 (JP)

Representative: Harding, Andrew Philip
Forresters
Skygarden
Erika-Mann-Strasse 11
DE-80636 München (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 6 May 2011
rejecting the opposition filed against European
patent No. 1496276 pursuant to Article 101(2)
EPC.

Composition of the Board:

Chairman: T. Kriner
Members: M. Alvazzi Delfrate
D. T. Keeling

Summary of Facts and Submissions

- I. By decision posted on 6 May 2011 the opposition division rejected the opposition against European patent No. 1 496 276.
- II. The appellant (opponent) lodged an appeal against that decision on 16 June 2011, paying the appeal fee on the same day. The statement setting out the grounds for appeal was filed at the same time.
- III. Oral proceedings before the Board of Appeal were held on 6 June 2013 in the absence of the duly summoned appellant.
- IV. The appellant requested in the written proceedings that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed and that the patent be maintained as granted (main request) or, in the alternative, that the patent be maintained in amended form in accordance with auxiliary request 1a filed on 4 January 2013.

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

"A thrust coupling bearing (100), for use in a coupling between a carriage and a bogie, comprising: an outer housing (101) having a base (105), wherein a side wall and a central post (107) are upstanding from the base (105), the central post (107) being integrally formed with the outer housing (101), the outer housing not being provided with central hole; an outer ball (103)

seated at least partially within the outer housing (101); and an inner ball (104) mounted on the central post (107) at one side of the bearing (100) such that access to assemble or disassemble the coupling bearing (100) is required only to the one side of the bearing (100) and wherein the outer ball (103) is sandwiched between the inner ball (104) and outer housing (101)."

Claim 1 of **auxiliary request 1** reads as follows (emphasis added):

"A thrust coupling bearing (100), for use in a coupling between a carriage and a bogie, comprising: an outer housing (101) having a spherical bearing surface (109) and having a base (105), wherein a side wall and a central post (107) are upstanding from the base (105), the central post (107) being integrally formed with the outer housing (101), the outer housing (101) not being provided with a central hole; an outer ball (103) seated at least partially within the outer housing (101) and having inner (111) and outer (110) spherical bearing surfaces, the outer spherical bearing surface (110) in contact with the spherical bearing surface (109) of the outer housing (101); an inner ball (104) having a spherical outer bearing surface (113) in contact with the inner spherical bearing surface (111) of the outer ball (103), wherein the inner ball is mounted on the central post (107) at one side of the bearing (100) such that access to assemble or disassemble the coupling bearing (100) is required only to the one side of the bearing (100) and wherein the outer ball (103) is sandwiched between the inner ball (104) and outer housing (101); and wherein the bearing surface (109) of the outer housing (101) is a bearing

surface of a spherical insert (102) of the outer housing (101)."

VI. The following document played a role for the present decision:

D1: EP -A- 0 559 635.

VII. The arguments of the appellant in support of its request can be summarised as follows:

The subject-matter of claim 1 of the main request lacked novelty and did not involve an inventive step. In particular it did not involve an inventive step starting from D1, which was considered to represent the most relevant prior art by the opposition division.

No argument was submitted against the maintenance of the patent on the basis of auxiliary request 1a.

VIII. The arguments of the respondent in support of its requests can be summarised as follows:

Lack of novelty as a ground of opposition had not been considered during the opposition proceedings. Therefore, it was a fresh ground for opposition, which should not be considered.

Furthermore, even considering the novelty objection in respect of D1, this could not justify the revocation of the patent as granted, since the subject-matter of claim 1 was novel over the coupling bearing disclosed in that document. The outer housing of the bearing shown in D1 was provided with a central hole and the

central post and the outer housing were two different elements welded together. Hence, they were not "integrally formed", as required by claim 1, since this wording implied that they were made in a single monolithic piece, as shown in the drawings and clearly described in column 5, lines 29 to 32 of the patent.

As to auxiliary request 1a, the subject-matter of its claim 1 was neither known nor rendered obvious by the prior art.

Reasons for the Decision

1. The appeal is admissible.
2. Main request
 - 2.1 An objection of lack of inventive step starting from D1 - identified as D8 and considered to represent the most relevant prior art for assessing inventive step in the decision under appeal - has been raised against claim 1 of the main request.
 - 2.2 It is true that in the present case lack of novelty as a ground of opposition was not raised during the opposition proceedings. However, novelty in view of the most relevant prior art has to be considered in the context of deciding on the ground of lack of inventive step since, if the most relevant prior art destroys the novelty of the claimed subject-matter, such subject-matter cannot involve an inventive step (see G 1/95, OJ 1996, 615, point 7.2 of the Reasons for the Decision).

2.3 D1 undisputedly discloses a thrust coupling bearing, for use in a coupling between a carriage and a bogie, comprising: an outer housing (1) having a base, wherein a side wall and a central post (2) are upstanding from the base; an outer ball (6a) seated at least partially within the outer housing; and an inner ball (5a) mounted on the central post at one side of the bearing such that access to assemble or disassemble the coupling bearing is required only to the one side of the bearing and wherein the outer ball is sandwiched between the inner ball and outer housing (see Figure 3).

2.4 It is true that in D1 the outer housing is obtained by assembling two elements: the housing 1 and the post 2. However, this is done by welding those elements together (see column 2, lines 21 to 31). As a result, they cannot be disassembled and form an integer.

Contrary to the respondent's opinion the wording "integrally formed" used in present claim 1 has no generally accepted definition and does not imply that the post and the outer housing are formed as a single monolithic piece. Nor does the description of the patent in suit, in particular column 5, lines 29 to 32, provide a definition of that wording to imply that the post and the outer housing are formed as a single monolithic piece. As to the drawings, they merely show preferred embodiments and do not limit the scope of the claims.

Therefore, two elements which form an integer, as is the case of the welded together housing 1 and post 2 of D1, are to be regarded as "integrally formed".

2.5 Moreover, once post 2 and housing 1 have been assembled and welded together the central opening 27, originally provided in the housing, does not exist any more, since it has been filled by the post. Therefore, an opening only exists in the intermediate housing element, while in the assembled thrust coupling bearing of D1 the post is not provided with a central hole.

2.6 Hence, no difference can be seen between the subject-matter of claim 1 of the main request and the bearing known from D1. As a consequence, that subject-matter cannot involve an inventive step.

3. Auxiliary request 1a

No argument has been submitted against the patentability of the subject-matter of claim 1 of auxiliary request 1a, nor does not Board see any reason to question it. Accordingly, the patent in suit can be maintained on the basis of this request.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to maintain the patent on the basis of the following documents:
 - Claims 1 to 13 of auxiliary request 1a filed with letter of 4 January 2013;
 - Description, columns 1, 2 and 5 as granted, columns 3 and 4 as filed at the oral proceedings;
 - Drawings, Figures 1 and 2 as granted.

The Registrar:

The Chairman:

V. Commare

T. Kriner