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Datasheet for the decision of 7 February 2019

Case Number: T 1856/14 - 3.2.06

Application Number: 10003306.7

Publication Number: 2202141

IPC: B62M3/00, B62K19/34

Language of the proceedings: EN

Title of invention:

Bottom bracket assembly for a bicycle

Patent Proprietor:

SHIMANO INC.

Opponents:

SRAM Deutschland GmbH Full Speed Ahead s.r.l. Europe

Headword:

Relevant legal provisions:

EPC Art. 100(c), 123(2) RPBA Art. 13(1)

Keyword:

Grounds for opposition - subject-matter extends beyond content of earlier application (yes)

Amendments - extension beyond the content of the application as filed (yes)

Late-filed auxiliary requests - request clearly allowable (no)

Decisions cited:

G 0001/05, G 0001/06, G 0002/10

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 1856/14 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 7 February 2019

Appellant: SHIMANO INC.

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Partnerschaft von Patent- und Rechtsanwälten mbB

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 9 July 2014

revoking European patent No. 2202141 pursuant to Article 101(3)(b) EPC.

Composition of the Board:

Chairman M. Harrison Members: W. Ungler

T. Rosenblatt

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Summary of Facts and Submissions

- The appeal was filed by the appellant (proprietor) against the decision of the opposition division revoking the patent in suit (hereinafter also "the patent").
- II. The patent had been granted on a divisional application of two earlier applications. For the purposes of the present decision it is sufficient to refer only to the first of the two earlier applications, published as

D1: EP-A-1 314 902.

- III. The Board issued a summons to oral proceedings with a subsequent communication containing its provisional opinion in which the Board stated *inter alia* that the subject-matter of claim 1 of the patent as granted as well of auxiliary requests 1 to 4, submitted with the appeal grounds appeared to extend beyond the content of D1.
- IV. With its letter dated 8 January 2019 the appellant submitted auxiliary request 5.
- V. Oral proceedings were held before the Board on 7 February 2019.
- VI. The appellant requested that the decision under appeal be set aside and the patent be maintained as granted (main request), auxiliarily that the patent be maintained in amended form on the basis of one of auxiliary requests 1 to 4 filed with the statement of grounds of appeal, or on the basis of auxiliary request 5 filed with letter dated 8 January 2019.

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- VII. The respondents requested that the appeal be dismissed.
- VIII. Furthermore, all parties requested that the case be remitted to the department of first instance for further examination in case novelty and inventive step were to be discussed.
- IX. Claim 1 of the patent as granted (main request) reads as follows:

"A bottom bracket assembly (100) to be mounted into a bottom bracket (33) of a bicycle, the bottom bracket assembly (100) comprising:

two adapter assemblies (124A, 124B), each adapter assembly (124A, 124B) including: an adapter member (130A, 130B) comprising a smaller diameter tubular portion (162A) having a threaded outer peripheral surface (166A), a radially outwardly extending side wall (174A) configured to be positioned in proximity to a side edge (198A) of the bottom bracket (33) in the assembled state, and a larger diameter portion (178A) having an inner peripheral surface (182A) and an outer peripheral surface (186A), wherein the threaded outer peripheral surface (166A) of the smaller diameter (162A) portion is adapted to screw into a threaded inner peripheral surface (194A) of the bottom bracket (33) when the adapter assembly (124A, 124B) is in the assembled state, and

a bearing unit (138A, 138B) comprising an inner bearing race (212A), an outer bearing race (216A), and a plurality of bearing balls (220A) disposed between the inner and outer bearing races (212A, 216A),

characterized in that each bearing unit (138A, 138B) is mounted to the larger diameter portion (178A) of the adapter members (130A, 130B), respectively, to be positioned radially inwardly from the inner peripheral

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surfaces (182A) of the larger diameter portions (178A), and the bottom bracket assembly further comprises a dust tube (104) adapted to be disposed within the bottom bracket (33) so that the adapter assemblies (124A, 124B) are fitted to the ends of the dust tube (104), respectively."

In Claim 1 of auxiliary request 1 the following features has been appended to the claim:

"wherein the dust tube (104) includes annular grooves (108, 112) at the opposite ends thereof so that O-ring seals (116, 120) are fitted within the annular grooves (108, 112) respectively."

Amended claim 1 according to **auxiliary request 2** reads as follows:

"A bottom bracket assembly (100) to be mounted into a bottom bracket (33) of a bicycle, the bottom bracket assembly (100) comprising: two adapter assemblies (124A, 124B), each adapter assembly (124A, 124B) including: an adapter member (130A, 130B) comprising a smaller diameter tubular portion (162A) having a threaded outer peripheral surface (166A), a radially outwardly extending side wall (174A) configured to be positioned in proximity to a side edge (198A) of the bottom bracket (33) in the assembled state, and a larger diameter portion (178A) having an inner peripheral surface (182A) and an outer peripheral surface (186A), wherein the threaded outer peripheral surface (166A) of the smaller diameter (162A) portion is adapted to screw into a threaded inner peripheral surface (194A) of the bottom bracket (33) when the adapter assembly (124A, 124B) is in the assembled state,

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a bearing unit (138A, 138B) comprising an inner bearing race (212A), an outer bearing race (216A), and a plurality of bearing balls (220A) disposed between the inner and outer bearing races (212A, 216A), a seal guard (146A), an outer seal (142A) and an inner seal (150A), wherein the seal guard (146A) functions as a support for the outer seal (142A) and the inner seal (150A),

wherein each bearing unit (138A, 138B) is mounted to the larger diameter portion (178A) of the adapter members (130A, 130B), respectively, to be positioned radially inwardly from the inner peripheral surfaces (182A) of the larger diameter portions (178A), and the bottom bracket assembly further comprises a dust tube (104) adapted to be disposed within the bottom bracket (33) so that the adapter assemblies (124A, 124B) are fitted to the ends of the dust tube (104), respectively, wherein the dust tube (104) includes annular grooves (108, 112) at the opposite ends thereof so that O-ring seals (116, 120) are fitted within the annular grooves (108, 112) respectively."

Amended claim 1 according to **auxiliary request 3** reads as follows:

"A bottom bracket assembly (100) to be mounted into a bottom bracket (33) of a bicycle, the bottom bracket assembly (100) comprising: two adapter assemblies (124A, 124B), each adapter assembly (124A, 124B) including: an adapter member (130A, 130B) comprising a smaller diameter tubular portion (162A) having a threaded outer peripheral surface (166A), a radially outwardly extending side wall (174A) configured to be positioned in proximity to a side edge (198A) of the bottom bracket (33) in the assembled state, and a larger

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diameter portion (178A) having an inner peripheral surface (182A), an outer peripheral surface (186A) and an abutment (208A) formed on the inner peripheral surface (182A), wherein the threaded outer peripheral surface (166A) of the smaller diameter (162A) portion is adapted to screw into a threaded inner peripheral surface (194A) of the bottom bracket (33) when the adapter assembly (124A, 124B) is in the assembled state,

a bearing unit (138A, 138B) comprising an inner bearing race (212A), an outer bearing race (216A), and a plurality of bearing balls (220A) disposed between the inner and outer bearing races (212A, 216A),

a bearing ring (134A) comprising a tubular portion (200A) and a radially outwardly extending side wall (204A), wherein the bearing ring (134A) contacts the inner peripheral surface (182A) of the larger diameter portion (178A) of the adapter member (30A) and wherein the radially outwardly extending side wall (204A) abuts against the abutment (208A) when the adapter assembly (124A) is in the assembled state,

a seal guard (146A), an outer seal (142A) and an inner seal (150A), wherein the seal guard (146A) functions as a support for the outer seal (142A) and the inner seal (150A),

wherein each bearing unit (138A, 138B) is mounted to the larger diameter portion (178A) of the adapter members (130A, 130B), respectively, to be positioned radially inwardly from the inner peripheral surfaces (182A) of the larger diameter portions (178A), wherein the outer bearing race (216A) contacts bearing ring (134A) when the adapter assembly (124a) is in the assembled state,

and the bottom bracket assembly further comprises a dust tube (104) adapted to be disposed within the bottom bracket (33) so that the adapter assemblies

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(124A, 124B) are fitted to the ends of the dust tube (104), respectively, wherein the dust tube (104) includes annular grooves (108, 112) at the opposite ends thereof so that O-ring seals (116, 120) are fitted within the annular grooves (108, 112) respectively."

Amended claim 1 according to **auxiliary request 4** reads as follows:

"A bottom bracket assembly (100) to be mounted into a bottom bracket (33) of a bicycle, the bottom bracket assembly (100) comprising:

two adapter assemblies (124A, 124B), each adapter assembly (124A, 124B) including:

an adapter member (130A, 130B) comprising a smaller diameter tubular portion (162A) having a threaded outer peripheral surface (166A), a radially outwardly extending side wall (174A) configured to be positioned in proximity to a side edge (198A) of the bottom bracket (33) in the assembled state, and a larger diameter portion (178A) having an inner peripheral surface (182A), an outer peripheral surface (186A) and an abutment (208A) formed on the inner peripheral surface (182A), wherein the threaded outer peripheral surface (166A) of the smaller diameter (162A) portion is adapted to screw into a threaded inner peripheral surface (194A) of the bottom bracket (33) when the adapter assembly (124A, 124B) is in the assembled state,

a bearing unit (138A, 138B) comprising an inner bearing race (212A), an outer bearing race (216A), and a plurality of bearing balls (220A) disposed between the inner and outer bearing races (212A, 216A), a bearing ring (134A) comprising a tubular portion (200A) and a radially outwardly extending side wall (204A), wherein the bearing ring (134A) contacts the

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inner peripheral surface (182A) of the larger diameter portion (178A) of the adapter member (30A) and wherein the radially outwardly extending side wall (204A) abuts against the abutment (208A) when the adapter assembly (124A) is in the assembled state,

a seal guard (146A), a seal ring (142A) functioning as an outer seal and an O-Ring (150A) functioning as an inner seal, wherein the seal guard (146A) functions as a support for the seal ring (142A) and the O-Ring (150A), the seal guard (146A) comprising an annular base member (230A), an inner tubular member (234A) and an outer tubular member (238A), the inner tubular member (234A) extending from a radially inner side surface of base member (230A) to form a radially inner peripheral surface (264A), wherein the radially inner peripheral surface (264A) contacts and supports the inner bearing race (212A) when the adapter assembly (124A) is in the assembled state, the outer tubular member (238A) extending from a radially outer side surface of base member (230A) and being spaced apart from a radially outermost edge (250A) of the base member (230A) to form a radially outer peripheral surface (254A), the bearing unit (138A) being sandwiched between the radially inner peripheral surface (264A) and the radially outer peripheral surface (254A) when the adapter assembly (124A) is in the assembled state, the O-Ring (150A) being disposed at an radially inner edge (242A) of the base member (130A) opposite to inner tubular member (234A) and wherein the seal ring (142A) contacts and is supported by the radially outer peripheral surface (254A), wherein each bearing unit (138A, 138B) is mounted to the larger diameter portion (178A) of the adapter members (130A, 130B), respectively, to be positioned radially inwardly from the inner peripheral surfaces (182A) of the larger diameter portions (178A) , wherein - 8 - T 1856/14

the outer bearing race (216A) contacts bearing ring (134A) when the adapter assembly (124a) is in the assembled state, and the bottom bracket assembly further comprises a dust tube (104) adapted to be disposed within the bottom bracket (33) so that the adapter assemblies (124A, 124B) are fitted to the ends of the dust tube (104), respectively, wherein the dust tube (104) includes annular grooves (108, 112) at the opposite ends thereof so that 0-ring seals (116, 120) are fitted within the annular grooves (108, 112) respectively."

Amended claim 1 according to auxiliary request 5 reads as follows:

"A bottom bracket assembly (100) to be mounted into a bottom bracket (33) of a bicycle, the bottom bracket assembly (100) comprising: two adapter assemblies (124A, 124B), each adapter assembly (124A, 124B) including: an adapter member (130A, 130B) comprising a smaller diameter tubular portion (162A) having a threaded outer peripheral surface (166A), a radially outwardly extending side wall (174A) configured to be positioned in proximity to a side edge (198A) of the bottom bracket (33) in the assembled state, and a larger diameter portion (178A) having an inner peripheral surface (182A), an outer peripheral surface (186A) and an abutment (208A) formed on the inner peripheral surface (182A), wherein the threaded outer peripheral surface (166A) of the smaller diameter (162A) portion is adapted to screw into a threaded inner peripheral surface (194A) of the bottom bracket (33) when the adapter assembly (124A, 124B) is in the assembled state,

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a bearing unit (138A, 138B) comprising an inner bearing race (212A), an outer bearing race (216A), and a plurality of bearing balls (220A) disposed between the inner and outer bearing races (212A, 216A), a bearing ring (134A) comprising a tubular portion (200A) and a radially outwardly extending side wall (204A), wherein the bearing ring (134A) contacts the inner peripheral surface (182A) of the larger diameter portion (178A) of the adapter member (30A) and wherein the radially outwardly extending side wall (204A) abuts against the abutment (208A) when the adapter assembly (124A) is in the assembled state, a seal guard (146A) formed of a nonmetallic material, a seal ring (142A) functioning as an outer seal and an O-Ring (150A) functioning as an inner seal, wherein the seal guard (146A) functions as a support for the seal ring (142A) and the O-Ring (150A), the seal guard (146A) comprising an annular base member (230A), an inner tubular member (234A) and an outer tubular member (238A), the inner tubular member (234A) extending from a radially inner side surface of base member (230A) to form a radially inner peripheral surface (246A), wherein the radially inner peripheral surface (246A) contacts and supports the inner bearing race (212A) when the adapter assembly (124A) is in the assembled state, wherein a protuberance (248A) extends radially outwardly from a free edge (149A) of inner tabular member (234A) to lock bearing unit (138A) in position on inner tubular member (234A), the outer tubular member (238A) extending from a radially outer side surface of base member (230A) and being spaced apart from a radially outermost edge (250A) of the base member (230A) to form a radially outer peripheral surface (254A), wherein the radially outer peripheral surface (254A) contacts and supports seal ring (142A) and the outer bearing race (216A) of

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bearing unit (138A) when the adapter assembly (124A) is in the assembled state,

the bearing unit (138A) being sandwiched between the radially inner peripheral surface (246A) and the radially outer peripheral surface (254A) when the adapter assembly (124A) is in the assembled state, the O-Ring (150A) being disposed at a radially inner edge (242A) of the base member (230A) opposite to inner tubular member (234A),

wherein the seal ring (142A) is an L-shaped ring member having a base portion (258A) and a radially outwardly extending lip portion (262A) that forms an acute angle with the base portion (258A), wherein the base portion (258A) contacts and is supported by the radially outer peripheral surface (254A), and the lip portion (262A) contacts the inner peripheral surface (162A) of the adapter member (130A),

wherein each bearing unit (138A, 138B) is mounted to the larger diameter portion (178A) of the adapter members (130A, 130B), respectively, to be positioned radially inwardly from the inner peripheral surfaces (182A) of the larger diameter portions (178A) , wherein the outer bearing race (216A) contacts bearing ring (134A) when the adapter assembly (124a) is in the assembled state, and the bottom bracket assembly further comprises a dust tube (104) adapted to be disposed within the bottom bracket (33) so that the adapter assemblies (124A, 124B) are fitted to the ends of the dust tube (104), respectively, wherein the dust tube (104) includes annular grooves (108, 112) at the opposite ends thereof so that O-ring seals (116, 120) are fitted within the annular grooves (108, 112) respectively."

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X. The appellant's arguments can be summarised as follows.

Main request

D1 related to improved sealing of the bracket assembly against contaminants, as explained in paragraphs 3 and 4 of the description. The skilled person understood that two inventive solutions were proposed for improving the sealing against contaminants reaching the bearing assemblies of the bracket assembly from two different locations. The invention claimed in the patent in suit concerned the improved sealing of the bracket assembly against contaminants reaching the bearing assemblies through the seat tube of the bicycle frame. For this purpose, the skilled person recognised that the dust tube mentioned in paragraph 8 of D1 was necessary. The skilled person's focus was thus directed to those components relevant for this purpose, in particular those which defined the arrangement of the bearing assemblies and adapter members with respect to the dust tube. Other components or details, such as the particular arrangement of the sealing assembly at the crank arm site, as described for example in paragraph 15 of D1, were not required for sealing against contaminants entering through the seat tube. According to paragraph 17 it was not necessary to provide all described advantages in a particular embodiment at the same time.

Auxiliary requests 1 to 4

Further details of the sealing assemblies were defined in reply to the objections in the impugned decision. General inner and outer seals, such as defined in auxiliary requests 1 and 2, were disclosed in col. 4, lines 57/58 and col. 5, lines 8/9 of D1.

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In particular, amended claim 1 of auxiliary request 4 defined all features considered to be missing according to the impugned decision. The further details of seal ring 142A mentioned in paragraph 15 of D1 did not have to be defined in the claim since it was explicitly stated in this paragraph that it could take many different forms.

Auxiliary request 5

This request should be admitted since it was filed in due time in response to the unexpected preliminary opinion set out by the Board in its communication in regard to auxiliary request 4. It remedied the outstanding objection concerning the definition of the seal ring 142A. The features "spacer" and "spacer cover" were nevertheless functionally not related to the sealing of the bracket assembly. Spacers were anyway optional and could be omitted, as was apparent also from paragraphs 9 and 10 of D1.

XI. The respondents' arguments can be summarised as follows.

The disclosure of two inventive solutions in the earlier application was contested; the dust tube was mentioned only once in the description, without paying any particular attention to its function. The description only disclosed a single embodiment and there was no support to single out certain features. The features relating to the specific structure of the seal assembly between the bearing unit and the adapter member, as well as the spacer and spacer cover were inter alia missing in granted claim 1. The first feature in the characterising portion of granted claim

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1 was not disclosed at all in D1. For these reasons neither the main request nor auxiliary requests 1 to 4 were allowable. Auxiliary request 5 was filed late and anyway not prima facie allowable since, for example, the objection against the omitted spacers still applied. It should thus not be admitted into the proceedings.

Reasons for the Decision

Main request - Article 100(c) EPC

The patent was granted on a divisional application filed on the basis of a sequence of two earlier European applications, the initial one thereof being published as D1.

According to the opposition division, the opposition ground under Article 100(c) EPC prejudiced maintenance of the patent as granted because the subject-matter of claim 1 extended beyond the content of D1.

- 2. The appellant argued basically that the skilled person would have understood from D1 that two inventive solutions to the initial problem formulated were disclosed, that the patent was directed to the second invention and that the skilled person would have recognised which features disclosed in D1 were relevant for this purpose.
- 3. Having regard to the very similar wording of the opposition ground raised and the wording of Article 76(1) EPC which sets out requirements to be met by a

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divisional application, the Board considers that when examining the opposition ground of Article 100(c) EPC raised against a granted patent, the same principles apply as when examining whether the requirement of Article 76(1) EPC is fulfilled.

According to the Enlarged Board of Appeal decisions G 1/05 (OJ 2008, 271) and G 1/06 (OJ 2008, 301), when examining for the latter requirement, the same principles as for the requirement of Article 123(2) EPC apply (see points 5.1 and 9.2 of the reasons of G 1/05 and G 1/06, ibid.).

The basic principle in turn when applying Article 123(2) EPC is to be found in the jurisprudence of the Enlarged Board of Appeal and was summarised and confirmed in its decision G 2/10 (OJ EPO 2012, 376, point 4.3).

Applied to the present case, it thus has to be established whether the subject-matter of the patent in suit is directly and unambiguously derivable by a skilled person, using common general knowledge, and seen objectively and relative to the date of filing, from the whole of the documents (i.e. description, claims and figures) of, inter alia, the earliest application D1 as filed.

- 4. The Board finds that this is not the case for the following reasons.
- 4.1 It is undisputed that the originally filed claims of D1 are not directed to the subject-matter of granted claim 1 of the patent in suit.

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- 4.2 The only basis indicated by the appellant is the description and the figures of D1. The features defined in claim 1 are derived in particular from the description of the single embodiment of a bottom bracket assembly to be mounted to a bottom bracket of a bicycle frame. The embodiment however comprises many further features which have been disclosed in combination with, i.e. functionally and structurally linked to, the features which have been defined in claim 1. For example, and as set out in the Board's preliminary opinion based on the arguments of both respondents, there is no indication in the description, the figures or the claims of D1 which would lead the skilled person to consider that the seal ring 142A and O-ring 150A of each seal assembly at the crank arm site could be dispensed with in the disclosed bottom bracket assembly. Paragraph 9 of the description defines these rings unambiguously as comprised in the single embodiment of the adapter assemblies. Paragraphs 13 and 15 disclose further features thereof in this regard. There is no direct and unambiguous disclosure for an assembly omitting these features, which would be required according to the accepted standard for considering the issue of the content of the application as filed (see point 3 above).
- 4.3 Even assuming, in favour of the appellant, that the skilled person would have considered the dust tube and its connection to the adapter members to contribute to superior sealing against contaminants reaching the bottom bracket assembly from the seat tube of the bicycle frame, the Board cannot find any disclosure in D1 for the particular combination of features taken in isolation from the description and defined in granted claim 1. The appellant's justification for its argument of disclosure, based on the question which of the

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disclosed features would have been considered by the skilled person to be required for achieving the sealing against contaminants arriving through the seat tube, does not rely on the standard set in e.g. G2/10 and is therefore not accepted. Even when taking into account the passage referred to by the appellant in paragraph 17 of D1, stating that it was not necessary for all advantages to be present in a particular embodiment at the same time, the Board does not arrive at a different finding. That statement is far too unspecific and does not allow the skilled person to derive a direct and unambiguous disclosure of the specific combination of features of granted claim 1 in isolation from all the other features which are structurally and functionally linked to them.

5. The Board concludes that the subject-matter of claim 1 of the patent in suit extends beyond the content of the earlier application as filed, D1, prejudicing maintenance of the patent as granted.

Auxiliary requests 1 to 4 - Article 123(2) EPC

As was also noted in the Board's preliminary opinion, amended claim 1 of each of the respective auxiliary requests 1 to 4 does not define the seal ring 142A together with the other features in which context it is disclosed, such as for example its general L-shape and the spatial arrangement of its different sections in regard to the other features of the bottom bracket assembly, as disclosed in paragraph 15 of D1. The resulting subject-matter of the respective claims thus still extends beyond the content of the earlier application, contrary to the requirement of Article 123(2) EPC.

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- 6.1 More specifically, similar to granted claim 1, amended claim 1 of auxiliary request 1 still does not define inter alia, the seal ring 142A and O-ring 150A. The same conclusions as made in regard to the granted claim apply equally to this claim. This was also not contested by the appellant-proprietor.
- and 3 only generally defines an outer seal and an inner seal. In paragraph 15 of the description the expressions "inner seal" and "outer seal" are only used to explain the function of the specific seal ring 142A and O-ring 150 as components of the adapter assemblies. Other passages in D1 disclosing general inner and outer seals, independent of the specific rings, their shape and arrangement in the single embodiment of the bottom bracket assembly, were not indicated by the appellant-proprietor and the Board also could not find any such passages. Therefore the subject-matter of the amended claims of auxiliary requests 2 and 3 does not meet the requirements of Article 123(2) EPC.
- Although claim 1 of auxiliary request 4 defines both seal ring 142A and 0-ring 150A, the Board cannot accept that the further features relating for example to the general L-shape of seal ring 142A would be considered by the skilled personal as optional features that could be dispensed with (as argued by the appellant based on the statement in column 5, lines 6 to 8 of D1). This passage indeed states that the seal ring 142A may take many different forms, without there being any need of a direct contact between the components. However, the claim defines specifically contact and support between the seal ring 142A and a radially outer peripheral surface of the seal guard. The function of "contact and support" of the seal ring is nevertheless only

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disclosed in the lines immediately preceding the abovecited statement, i.e. column 4, line 57 to column 5, line 6, which is however specifically based on the contact and support of specific portions of the Lshaped seal ring 142A in relation to other features defined in the claim. In the absence of any other passage in D1 disclosing the added generalised feature, the amendments made by means of claim 1 of the fourth auxiliary request also lead to subject-matter extending beyond the content of the earlier application as filed.

7. As a consequence, none of the independent claims of auxiliary requests 1 to 4 meets the requirements of Article 123(2) EPC, prejudicing thus maintenance of the patent on the basis of any of these requests.

Auxiliary request 5 - Article 13(1) RPBA

8. Auxiliary request 5 was filed after the time limit for filing the appeal grounds (see Article 12(1) and (2) RPBA) and therefore constitutes an amendment to the appellant's case.

According to Article 13(1) RPBA, any amendment to a party's case may be admitted and considered at the Board's discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

In order to be in line with the requirement of procedural economy, amendments should be prima facie allowable in the sense that they at least overcome the objections raised against previous requests without giving rise to any new ones.

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- 9. Although the amendment to claim 1 replies to the objection in regard to the omitted features of the seal ring 142A, it still does not overcome all the outstanding objections raised by the respondents under Article 123(2) EPC. For example, and as also argued by the respondents during the opposition proceedings and in their reply to the appeal grounds, the features "spacer" and "spacer cover" are disclosed in D1 as components of the adapter assemblies (see for example column 1, lines 23-27 and paragraph 9). Although the number of spacers used in the assembled state of the bottom bracket assembly may vary, as pointed out by the appellant-proprietor with reference to column 3, lines 40/41, no indication can be found in D1 that spacers and spacer covers may be omitted entirely. That the spacer and spacer covers would not be relevant for the function of sealing is not a convincing reason to justify their omission having regard to the accepted standard for considering the issue of the content of the application as filed (see point 3 above). Moreover, according to the passage in column 1, lines 23-27, the specific function of the adapter assemblies is to adjust the axial alignment of the front sprocket on the axle mounted by the bottom bracket assembly by screwing the adapter members of the adapter assemblies more or less deeply into the bottom bracket, the exact depth of screwing being determined by the number of spacers used. Hence the spacers and spacer cover are functionally and structurally linked to the adapter assemblies defined in claim 1. At least for this reason the resulting subject-matter of claim 1 still, prima facie, extends beyond the content of the earlier application as filed, contrary to Article 123(2) EPC.
- 10. Although the appellant argued that the Board had issued an unexpected preliminary opinion, which should justify

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the filing of auxiliary request 5 at such a late stage (which the Board anyway does not accept), this cannot alter the foregoing finding on the prima facie non-allowability of the request. And, in terms of the preliminary opinion being unexpected for the appellant, the Board had merely stated why the arguments of the opponents, which had remained unchanged since their responses to the appeal, were found to be persuasive. Such an opinion can hardly be considered unexpected, even if the appellant did not agree with it.

- 11. Considering all the circumstances of the case, including also the fact that auxiliary request 5 was presented at a very late stage of the proceedings, the Board exercised its discretion according to Article 13(1) RPBA not to admit auxiliary request 5 into the proceedings.
- 12. In the absence of any request which meets the requirement of Article 123(2) EPC, the parties' requests for remittal are moot.

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Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated