

Internal distribution code:

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

**Datasheet for the decision
of 16 June 2023**

Case Number: T 0499/20 - 3.3.03

Application Number: 10852865.4

Publication Number: 2581410

IPC: C08K3/00, C08K3/04, C08K3/22,
C08K3/24, C08K3/26, C08K3/30,
C08K3/36, C08L21/00

Language of the proceedings: EN

Title of invention:
RUBBER COMPOSITION AND MOLDED RUBBER PRODUCTS

Patent Proprietors:
NTN Corporation
NAKANISHI METAL WORKS CO., LTD.

Opponent:
Aechter, Bernd

Relevant legal provisions:
EPC Art. 54, 56, 114(2), 123(2)
RPBA 2020 Art. 12(6), 13(2)

Keyword:

Late-filed facts - error in use of discretion at first instance (no)
Late-filed facts - should have been submitted in first-instance proceedings (yes)
Inventive step - main request (no) - second auxiliary request (yes)
Amendment after summons - exceptional circumstances - first auxiliary request (no) - second auxiliary request (yes)
Amendments - second auxiliary request - extension beyond the content of the application as filed (no)
Novelty - second auxiliary request (yes)
Late-filed objection - should have been submitted in first-instance proceedings (yes)

Decisions cited:

G 0007/93, J 0014/19, T 0713/14, T 1294/16, T 0482/18,
T 0494/18, T 0914/18, T 1598/18, T 2091/18, T 2920/18,
T 2988/18, T 0339/19, T 2295/19, T 0247/20



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
Fax +49 (0)89 2399-4465

Case Number: T 0499/20 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 16 June 2023

Appellant: Aechter, Bernd
(Opponent) Ter Meer Steinmeister & Partner Patentanwälte mbB
Nymphenburgerstrasse 4
80335 München (DE)

Representative: Ter Meer Steinmeister & Partner
Patentanwälte mbB
Nymphenburger Straße 4
80335 München (DE)

Respondents: NTN Corporation
(Patent Proprietors) 3-17, Kyomachibori 1-chome
Nishi-ku
Osaka-shi, Osaka 550-0003 (JP)

NAKANISHI METAL WORKS CO., LTD.
3-5, Tenmabashi 3-chome
Kita-ku
Osaka-shi
Osaka 530-8566 (JP)

Representative: Viering, Jentschura & Partner mbB
Patent- und Rechtsanwälte
Am Brauhaus 8
01099 Dresden (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 20 December
2019 rejecting the opposition filed against
European patent No. 2581410 pursuant to Article
101(2) EPC.**

Composition of the Board:

Chairman D. Semino
Members: M. Barrère
 A. Bacchin

Summary of Facts and Submissions

I. The appeal of the opponent lies against the decision of the opposition division rejecting the opposition against European Patent number 2 581 410.

II. The following documents were *inter alia* cited in the decision of the opposition division:

D7: US 6 274 662 B1

D9: EP 0 795 580 A1

D10: US 2009/0318594 A1

D11: excerpt from Wikipedia regarding the term "acrylic rubber"

D12: T. Whelan, POLYMER TECHNOLOGY DICTIONARY, Chapman & Hall, 1994, pages 13 and 14

D13: R. B. Simpson, Rubber Basics, RAPRA Technology Ltd., 2002, pages 94 and 95

D14: Norm ASTM D1418-17, Standard practice for rubber and rubber latices - Nomenclature

D15: US 4 904 736

D16: EP 0 796 890 A1

D17: US 2014/0346707 A1

D18: J. W. Gooch, "Acrylic rubber", Encyclopedic Dictionary of Polymers, Springer, 2011, page 15

D19: WO 2008/023075 A1

III. In that decision the opposition division held, among others, that:

- Documents D15 to D17 were not admitted to the proceedings.

- The grounds for opposition under Article 100(a) (novelty and inventive step) and (c) EPC did not prejudice the maintenance of the patent as granted.

- IV. The opponent (appellant) filed an appeal against said decision.
- V. With the rejoinder to the statement of grounds of appeal, the patent proprietors (respondents) filed four sets of claims as first to fourth auxiliary requests as well as the following documents:
 - D20: R. C. Klingender - Handbook of Specialty Elastomers, ISBN 978-1-57444-676-0, page 161
 - D21: N. Kamiya *et al.* - Acrylic Rubber/ Epichlorohydrin Rubber, Compendium of Synthetic Rubber Processing Technology; Taiseisha Co. Ltd.; Vol. 12, 1980, pages relating to Chapter 3-1
- VI. Following the summons to oral proceedings sent by letter dated 9 June 2022, the Board issued a communication pursuant to Article 15(1) RBPA 2020 on 12 April 2023.
- VII. With the letter dated 10 May 2023 the respondents filed two additional sets of claims as first and second auxiliary requests.
- VIII. Oral proceedings were held before the Board on 16 June 2023.
- IX. The appellant requested that the decision under appeal be set aside and the patent be revoked.

The respondents requested that the appeal be dismissed, i.e. that the patent be maintained as granted (main

request). In the alternative, they requested maintenance of the patent in amended form on the basis of one of

- the first or second auxiliary requests, as filed with letter dated 10 May 2023, or

- the third to sixth auxiliary requests, filed as first to fourth auxiliary requests with the rejoinder to the statement of grounds of appeal.

X. The claims as granted (main request of the respondents) read as follows:

"1. A rubber composition comprising a first compounding ingredient which is one or more kinds selected from the group consisting of calcium carbonate, magnesium oxide, aluminum oxide and barium sulfate in an amount of 50 to 200 parts by mass based on 100 parts by mass of a rubber component, wherein the composition does neither comprise carbon black nor a silica, and wherein the rubber component is acrylic rubber.

2. A rubber composition comprising a first compounding ingredient which is barium sulfate in an amount of 50 to 200 parts by mass based on 100 parts by mass of a rubber component, and a second compounding ingredient which is one or two kinds selected from the group consisting of carbon black and a silica in an amount of more than 0 parts by mass and less than or equal to 50 parts by mass, wherein the rubber component is acrylic rubber.

3. The rubber composition according to claim 1, wherein barium sulfate is used as the first compounding ingredient.
4. The rubber composition according to any of claims 1 to 3, wherein the first compounding ingredient is included in an amount of 100 to 200 parts by mass based on 100 parts by mass of the rubber component.
5. The rubber composition according to claim 2, wherein the second compounding ingredient is included in an amount of 10 to 40 parts by mass based on 100 parts by mass of the rubber component.
6. A molded rubber product which is formed by cross-linking the rubber composition according to any one of claims 1 to 5.
7. A seal for a bearing which is formed by cross-linking the rubber composition according to any one of claims 1 to 5.
8. The seal for a bearing according to claim 7, wherein the seal for a bearing is abraded while being slid in an initial stage of rotation of the bearing."

In the first auxiliary request, claim 1 was amended with respect to granted claim 1 in that the first compounding ingredient was barium sulfate. In addition, dependent claim 3 as granted was deleted and the dependencies in the remaining claims were adapted.

The claims of the second auxiliary request differed from the granted claims in that claims 1 and 3 as

granted were deleted and the dependencies in the remaining claims were adapted.

The wording of the third to sixth auxiliary requests is not relevant to this decision.

XI. The appellant's submissions, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They were essentially as follows:

(a) Admittance of documents D15 to D17

D15 to D17 should be admitted into the proceedings.

(b) Admittance of documents D20 and D21

D20 and D21 should not be admitted into the proceedings.

(c) Main request (patent as granted)

The subject-matter of granted claims 1 and 2 did not involve an inventive step over document D9 as the closest prior art.

(d) First auxiliary request

(i) Admittance

The first auxiliary request should not be admitted into the proceedings.

(e) Second auxiliary request

(i) Admittance

The second auxiliary request should not be admitted into the proceedings.

(ii) Article 123(2) EPC

Claims 1 and 4 to 6 did not comply with the requirements of Article 123(2) EPC.

(iii) Novelty

The subject-matter of claim 1 was not novel in view of document D7.

(iv) Inventive step over document D19 as the closest prior art

The objection of lack of inventive step over D19 as the closest prior art should be admitted into the proceedings.

XII. The respondents' submissions, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They were essentially as follows:

(a) Admittance of documents D15 to D17

D15 to D17 should not be admitted into the proceedings.

(b) Admittance of documents D20 and D21

D20 and D21 should be admitted into the proceedings.

(c) Main request (patent as granted)

The subject-matter of granted claims 1 and 2 involved an inventive step over document D9 as the closest prior art.

(d) First auxiliary request

(i) Admittance

The first auxiliary request should be admitted into the proceedings.

(e) Second auxiliary request

(i) Admittance

The second auxiliary request should be admitted into the proceedings.

(ii) Article 123(2) EPC

Claims 1 and 4 to 6 complied with the requirements of Article 123(2) EPC.

(iii) Novelty

The subject-matter of claim 1 was novel in view of document D7.

(iv) Inventive step over document D19 as the closest prior art

The objection of lack of inventive step over D19 as the closest prior art should not be admitted into the proceedings.

Reasons for the Decision

1. Admittance of documents D15 to D17
 - 1.1 Documents D15 to D17 were filed by the appellant in opposition proceedings within the time limit for making final submissions before the oral proceedings under Rule 116(1) EPC. Since they were filed after the opposition period set by Article 99(1) EPC, their admittance into the proceedings was subject to the discretion of the opposition division. Documents D15 to D17 were not admitted by the opposition division and the appellant requests their admittance to the appeal proceedings in order to show how the term "acrylic rubber" can be interpreted (see statement of grounds of appeal, page 8, first paragraph). The admittance is contested by the respondents.
 - 1.2 According to the established case law, in particular decision G 7/93 (OJ EPO 1994, 775), point 2.6 of the reasons, Boards of Appeal should only overturn discretionary decisions of the first instance department if it is concluded that the said department exercised its discretion according to the wrong principles, or without taking into account the right principles or in an unreasonable way.
 - 1.3 According to the appellant, D15 to D17 were filed in response to documents D11 to D13 submitted by the respondents with their reply to the notice of opposition and purporting to give a narrow definition for the term "acrylic rubber".
 - 1.4 D15 to D17 were not admitted into the proceedings due to their late-filing and to the fact that they did not

appear to be *prima facie* relevant (see point 3.1.3 of the decision). In particular the opposition division considered that D15 to D17 were patent documents which could not be considered as source of common general knowledge.

1.5 The criterion applied by the opposition division is correct (see Case Law of the Boards of Appeal, 10th edition 2022, in the following "Case Law", IV.C.4.5.1). The appellant argued that patent documents may also be used to provide evidence of common general knowledge. Whereas the Board does not dispute this fact, it also underlines that patent specification may be exceptionally considered as evidence of common general knowledge only under special conditions leading the Board to reach this conclusion. This is for instance the case when a series of patent specifications provides a consistent picture that a particular technical procedure was generally known in the art at the relevant date, or when a field of research is so new that the technical knowledge is not yet available in textbooks (see Case Law, *supra*, I.C.2.8.2). The opposition division considered that the technical field under consideration, namely rubber products used for sealing a bearing, was not so new that the relevant technical knowledge was not yet available from textbooks and that the information provided was not *prima facie* relevant to be introduced into the proceedings. Hence the application of the *prima facie* relevance principle by the opposition division is not unreasonable.

1.6 Accordingly, the Board has no reason to consider that the first instance did not correctly exercise its discretion in not admitting D15 to D17 into the proceedings.

1.7 Nor does the Board see any reason to depart from this conclusion in the exercise of its own discretion under Article 12(6) RPBA 2020, according to which the Board shall not admit requests, facts, objections or evidence which were not admitted in the proceedings leading to the decision under appeal unless the circumstances of the appeal case justify their admittance. In the present case, the appellant has not invoked any such circumstances and the Board can not identify any such circumstance of the appeal case leading to a different conclusion on the relevance of D15 to D17. The Board finds in particular that documents D15 to D17 do not add any relevant information as they do not provide a uniform definition of the feature "acrylic rubber". Thus, the Board fails to see any justification for their admittance only at the appeal stage.

1.8 Consequently, documents D15 to D17 are not in the proceedings.

2. Admittance of documents D20 and D21

2.1 D20 and D21 were filed by the respondents with the rejoinder to the statement of grounds of appeal. Their admission to the proceedings, which is contested by the appellant, is subject to the discretionary power of the Board in accordance with Article 12, paragraphs (4) to (6) RPBA 2020.

2.2 According to the respondents, these documents were submitted to provide further evidence of the skilled person's general knowledge in relation to the feature "acrylic rubber" (see rejoinder, page 4, fifth paragraph). In particular, they support the

interpretation that the acrylic monomer must be present in the majority.

- 2.3 The admittance of D20 and D21 is contested by the appellant for the following reasons (see letter of 29 January 2021, page 2, point B.):

D20 and D21 are late filed and should have been submitted during opposition proceedings,

D20 and D21 are not *prima facie* relevant and

D21 is not a certified translation of the original document and therefore, one cannot be sure whether the translation reflects the content of the original document or not.

- 2.4 The Board notes that the question of the interpretation of the feature "acrylic rubber" was discussed at length during opposition proceedings. Already with the reply to the notice of opposition (see paragraph III.3.1), the patent proprietors filed documents D11 to D13 in support of their interpretation of the feature "acrylic rubber". Therefore, had the respondents wished to support their arguments with additional evidence, they should have submitted it during the opposition proceedings.

- 2.5 Under these circumstances, the Board finds it appropriate to exercise its discretion under Article 12(6) RPBA 2020 by not admitting documents D20 and D21 into the proceedings.

3. Reading of the feature "acrylic rubber"

- 3.1 In the decision under appeal, the opposition division considered that the term "acrylic rubber" should be interpreted as being "a copolymer comprising an acrylic acid ester monomer in majority, with rubber properties, as indicated on the last page of D12" (see point 3.1.4 of the Reasons).
- 3.2 The appellant contests the opposition division's findings for the following reasons:
- (a) The terms "acrylic rubber" and "rubber" are not defined in the opposed patent. These terms should therefore be interpreted in the broadest possible manner with the consequence that any polymer prepared from acrylic monomers anticipates said features.
 - (b) The interpretation put forward by the opposition division is too narrow and not supported by document D18.
- 3.3 The respondents adhere to the findings of the opposition division. Furthermore the interpretation put forward by the appellant is not reasonable and has no basis in the cited documents.
- 3.4 According to established case law (see Case Law, I.C. 4.1 and II.A.6.1), the normal rule of claim construction is that the terms used in a claim should be given their broadest technically sensible meaning in the context of the claim in which they appear.
- 3.5 The available documents provided by the parties to define the term "acrylic rubber" (essentially documents D11 to D14 and D18) offer a broad range of possible interpretations and do not allow the Board to extract a

single univocal definition for this term. Therefore the Board refrains from giving a general definition of the term "acrylic rubber". Instead, taking into account the above established principle (see point 3.4), the Board will check on a case-by-case basis whether the polymers of the prior art can be seen as an acrylic rubber or not.

Main request (patent as granted)

4. Inventive step

The appellant holds that the subject-matter of the granted claims lacks an inventive step over each of documents D9 and D19 alternatively taken as the closest prior art.

4.1 Document D9 as the closest prior art

The parties agree with the opposition division that D9 can represent the closest prior art for the subject-matter of granted claims 1 and 2. The Board has no reason to depart from that view.

4.1.1 Distinguishing features

(a) The appellant considers that:

the composition of claim 1 differs from D9 only in that the rubber composition is free of carbon black and silica (distinguishing feature (i)) and

the composition of claim 2 differs from D9 only in that the rubber composition

comprises barium sulfate instead of calcium carbonate (distinguishing feature (i'))

In particular, the appellant takes the view that all rubber components of D9 correspond to an acrylic rubber according to the opposed patent.

- (b) The respondents do not contest the above distinguishing features (i) and (i') but contend that the nature of the rubber component is a further distinguishing feature (distinguishing feature (ii)). As a matter of fact, no acrylic rubber would be disclosed in D9.
- (c) For the Board, it needs to be evaluated whether the rubber component used in the starting embodiment of D9 (as most promising springboard towards the invention) may be seen as an acrylic rubber.

The starting embodiments suggested by the appellant are the examples of table 1 because they disclose rubber compositions comprising 50 parts by weight of calcium carbonate (corresponding to a first compounding ingredient as defined in granted claim 1) and 10 parts by weight of a silica (Carplex 1120) (corresponding to a second compounding ingredient as defined in granted claim 2).

The rubber components used in those examples are hydrogenated acrylonitrile-butadiene copolymer rubbers (HNBR) and the question to be answered is whether said HNBR can be seen as an acrylic rubber. As noted by the appellant, the opposed patent provides almost no guidance for the selection of an acrylic rubber. While it is true that the examples of the opposed patent are based on "AR 71" (an

acrylic ester copolymer) as rubber component, it cannot be assumed that all acrylic rubber components should be necessarily acrylic ester copolymers. Therefore, in the absence of a clear definition in the patent, it is reasonable to rely on the general knowledge of the skilled person in order to clarify the scope of the feature "acrylic rubber". Moreover, in doing so, said feature should be given its broadest technically sensible meaning in the context of the claim in which it appears.

In relation to the interpretation of the above feature, the parties primarily cited documents D11 to D14 and D18. Among those documents, D18 is the only one which explicitly mentions that an acrylic rubber may be derived from acrylonitrile instead of an acrylate (see D18, page 15, right-hand column, second entry). However, as noted by the respondents, D18 is questionable in several aspects.

First, this document has been published after the filing date of the opposed patent. Secondly, according to the respondents, the reference cited in D18 as source for the definition of "acrylic rubber" (Harper C.A. - Handbook of Plastics, Elastomers, and Composites - 4th Edition) does not support the definition anywhere. At no stage of the appeal proceedings did the appellant refute the present respondents' criticism. Thirdly, the definition provided in D18 appears to be at odds with the teaching of D11 to D14 (see D11, first paragraph; D12, pages 14 and 15, definition of "acrylic rubber"; D13, paragraph 3.15; D14, page 1, right-hand column, last paragraph). For these

reasons, the Board cannot rely on D18 for the definition of the feature "acrylic rubber".

During the oral proceedings, the appellant also referred to D12 according to which acrylic rubbers are defined as "rubbery polymers, based on acrylic monomers" (see page 13, right-hand column, antepenultimate paragraph). Given that acrylonitrile belongs to the group of acrylic monomers according to a further definition provided in D12, it should be concluded that HNBR is an acrylic rubber (see page 13, right-hand column, definition of "acrylic monomer").

Irrespective of whether or not acrylonitrile can be seen as an acrylic monomer, the Board notes that D12 also defines acrylonitrile-butadiene rubber (NBR) as nitrile rubber but not as an acrylic rubber (see page 14, definition of "acrylonitrile/butadiene rubber"). Therefore, the appellant's argument based on D12 is not convincing.

As none of the remaining documents support the appellant's interpretation, the Board is of the opinion that an acrylonitrile butadiene rubber cannot be seen as an acrylic rubber.

(d) Therefore, the Board agrees with the respondents that the composition of claim 1 differs from the examples of D9 in that:

- (i) the composition is free of carbon black and silica and
- (ii) the rubber component is an acrylic rubber instead of HNBR;

and the composition of claim 2 differs from the examples of D9 in that:

- (i') the composition comprises barium sulfate instead of calcium carbonate and
- (ii) the rubber component is an acrylic rubber instead of HNBR.

4.1.2 Objective problem to be solved

- (a) While the respondents acknowledge that the opposed patent does not include a specific comparison with the compositions of D9, they consider that the opposed patent provides experimental evidence that the compositions according to granted claims 1 and 2 are suitable to prepare an abradable sliding seal (see rejoinder to the statement of grounds of appeal, page 16, last paragraph). Accordingly, the objective problem to be solved should be formulated as the provision of an alternative rubber composition for making an abradable sliding seal (instead of making any sealing material).
- (b) According to the appellant, it is not credible that an abradable sealing material may be obtained over the whole scope of granted claims 1 and 2.
- (c) As far as granted claim 1 is concerned, the Board notes that examples 9 to 11 of the opposed patent are the only ones falling under this claim. These examples provide evidence that specific compositions according to claim 1 lead to an abradable material (see table 3). While it is true that examples 9 to 11 are all based on barium sulfate as first compounding ingredient, the Board has *prima facie* no reason to consider that

compositions based on calcium carbonate, magnesium oxide or aluminium oxide (instead of barium sulfate) would lead to a different result. In fact, although examples 2 to 4 and 6 to 8 of the patent are not covered by present claim 1 (due to the presence of carbon black or silica), they nevertheless show that calcium carbonate, magnesium oxide or aluminium oxide do not preclude obtaining an abradable material. For these reasons, the Board considers it credible that the problem of obtaining an abradable material is solved over the entire scope of claim 1.

- (d) In view of the fact that the rubber compositions of D9 are also suitable for providing an abradable seal (see D9, claim 16 and table 1, "abrasion wear" results), the objective problem solved by the invention according to claim 1 is the provision of an alternative rubber composition for making an abradable sliding seal.
- (e) With respect to claim 2, which limits the first compounding ingredient to barium sulfate, the Board agrees with the respondents that the opposed patent provides evidence that rubber compositions according to that claim can be abraded and are therefore suitable for providing an abradable seal (see examples 1, 5 and 12 to 19).

The appellant argued essentially that the abrasion results provided in the patent did not show an improvement compared to the examples of D9. In that respect reference was made to example 18 of the patent which had poor abrasion properties. The appellant further asserted that the examples of the patent did not include compositions comprising

silica or carbon black in an amount of less than 25 parts by weight. A direct comparison with D9, whose examples contain 10 parts by weight of silica, would therefore not be possible.

The Board accepts that the abrasion properties of example 18 of the patent are inferior to those of examples 1, 5, 12-17 and 19, but the rubber composition of example 18 can still be considered as abradable because the average abrasion is between 0.1 mm and 0.2 mm (see opposed patent, table 2, example 18 and paragraph [0043]). While it is not disputed that a direct comparison between the compositions of D9 is difficult, it can at least be acknowledged that the compositions according to claim 2 and the compositions of D9 are abradable (see D9, claim 16 and table 1, "abrasion wear" results).

- (f) Therefore, the Board concludes that the objective problem solved by the invention according to claim 2 is the provision of an alternative rubber composition for making an abradable sliding seal.

4.1.3 Obviousness of the solution

(a) Claim 1

It remains to be evaluated whether it was obvious for a skilled person wishing to provide an alternative rubber composition for making an abradable sliding seal:

to omit silica and carbon black from the composition (distinguishing feature (i)) and

to replace HNBR by an acrylic rubber
(distinguishing feature (ii)).

- Distinguishing feature (i):

According to the appellant, it was obvious in view of the teaching of D9, D10 or D19 to omit silica and carbon black from the compositions of D9.

The respondents held that the skilled person would not consider the disclosure of D10 and D19 when starting from D9. Furthermore D9 would teach away from the solution proposed in claim 1 (since the presence of a reinforcing filler such as silica or carbon black would be essential).

With respect to D10, the Board agrees with the respondents that the purpose of D10 is not compatible with D9. Indeed, D9 pertains to rubber compositions for use as sealing materials, while D10 is completely silent on rubber compositions and seals.

Similarly, D19 relates to rubber materials having, *inter alia*, improved scratch resistance (see D19, page 14, line 14). Since the scratch resistance is the opposite of the purpose of the opposed patent (the provision of an abradable material), the skilled person would have no reason to consider the teaching of this document in order to provide an alternative abradable material.

It remains to be evaluated whether it was obvious in view of D9 to omit silica and carbon black.

Contrary to the respondents' view, the Board does not consider that D9 teaches away from omitting these

compounds as reinforcing fillers. In fact claim 1 of D9 does not exclude that other reinforcing fillers may be used. Although it is true that silica and carbon black are the only explicit examples of reinforcing fillers in D9 (see in particular claim 6), the skilled person is not precluded from using other reinforcing fillers known in the present technical field when simply looking for an alternative rubber composition for making an abradable sliding seal. In fact, claim 1 of D9, on which claim 6 depends, does not specify the nature of the reinforcing filler so that the skilled person is free to choose any such filler known in the art. Already for that reason, the provision of an alternative rubber composition without silica or carbon black (corresponding to distinguishing feature (i)) is obvious in view of D9 alone.

- Distinguishing feature (ii):

The appellant takes the view that D9 suggests to use rubber components such as a butadiene-methyl acrylate-acrylonitrile copolymer rubber (among others) corresponding to an acrylic rubber according to the opposed patent.

The respondents hold that the rubber components of D9 cannot be considered as acrylic rubbers.

For the Board, it needs to be evaluated whether any of the alternative rubber components disclosed in D9 may be seen as an acrylic rubber.

D9 (see page 3, last paragraph) discloses that the rubber component may be a hydrogenated butadiene-methyl acrylate-acrylonitrile or a butyl acrylate-ethoxyethyl acrylate-vinyl chloroacetate-acrylonitrile copolymer

rubber (emphasis added by the Board). The respondents consider that the acrylate copolymers of D9 are not acrylic rubbers because the acrylic acid ester monomer (such as methyl acrylate or butyl acrylate) is not necessarily present in majority.

In connection with the interpretation of the above feature, the parties cited again documents D11 to D14 and D18. According to D11 or D12 acrylic rubbers are alkyl acrylate copolymers. However D11 does not specify a minimum amount of acrylate in the copolymer.

The respondents pointed out that D12 defined acrylic rubbers as "rubbery polymers, based on acrylic monomers" (see last page of D12, penultimate paragraph). The use of the expression "based on" would imply that the acrylic monomer should be present in majority. The Board cannot agree with this interpretation. In the Board's view, no clear limitation in terms of acrylic monomer content can be derived from the expression "based on". Instead, the Board is of the opinion that the expression "based on" means, in the broadest technically sensible interpretation, that the acrylic rubber is merely derived from an acrylic monomer (irrespective of the amount thereof).

Therefore, taking into account the broadest technically sensible definition of the feature "acrylic rubber", the Board finds no basis to limit this feature to copolymers containing a majority of acrylate monomer. It follows that the hydrogenated butadiene-methyl acrylate-acrylonitrile copolymer or the butyl acrylate-ethoxyethyl acrylate-vinyl chloroacetate-acrylonitrile copolymer mentioned in the description of D9 can be considered as acrylic rubbers according to present

claim 1, since they are derived from methyl acrylate or butyl acrylate which the parties do not dispute are acrylic monomers.

Consequently it is an obvious option for the skilled person wishing to provide an alternative to the abradable materials of the examples in D9 to replace the HNBR rubber with an acrylic rubber as disclosed in D9 (see page 3, last paragraph).

As both distinguishing features are obvious, the subject-matter of claim 1 does not involve an inventive step over D9 alone.

(b) Claim 2

It remains to be evaluated whether it was obvious for a skilled person wishing to provide an alternative rubber composition for making an abrasive sliding seal:

to replace calcium carbonate (used in the examples of D9) by barium sulfate (distinguishing feature (i')) and

to replace HNBR by an acrylic rubber (distinguishing feature (ii)).

- Distinguishing feature (i'):

According to the appellant, it is obvious in view of D10 or D19 to use barium sulfate in the rubber compositions of D9.

The respondents hold that the skilled person would not consider the teachings of D10 and D19 when starting from D9. Furthermore D10 and D19 fail to provide any

hint or guidance which would motivate the skilled person to selectively include barium sulfate in the compositions of D9.

With regard to D10, the Board agrees with the respondents. As mentioned previously (see point 4.1.3 (a)), the skilled person would not have considered the teaching of this document in order to provide an alternative rubber composition for making an abrasive sliding seal.

The same consideration applies to D19 as noted in the context of claim 1 (see point 4.1.3 (a)).

Consequently, none of the documents cited by the appellant in the context of granted claim 2 suggest to use barium sulfate in order to provide a further abradable material. Already for that reason, the subject-matter of claim 2 involves an inventive step over D9 as the closest prior art.

5. However, in view of the fact that claim 1 as granted does not involve an inventive step over D9 as the closest prior art, the main request of the respondents is not allowable.

First auxiliary request (filed with letter of 10 May 2023)

6. Admittance

- 6.1 The first auxiliary request was filed with the respondents' letter of 10 May 2023, i.e. after notification of the summons to oral proceedings which had been issued in 2022. Thus the admittance of this request is governed by Article 13(2) RPBA 2020, according to which any amendment to a party's appeal

case is, in principle, not taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

The Board concurs with the approach taken in several decisions (T 247/20, point 1.3 of the Reasons; T 2988/18, point 1.2 of the Reasons; T 2920/18, point 3.4 of the Reasons and T 2295/19, point 3.2 of the Reasons), according to which the examination under Article 13(2) RPBA 2020 is carried out in two steps. The question to be answered in the first step is whether the submission objected to is an amendment to a party's appeal case. If that question is answered in the negative, then the Board has no discretion not to take the submission into account. If, however, that question is answered in the affirmative, then the Board needs to decide whether there are exceptional circumstances, justified by cogent reasons (second step).

- 6.2 The first question to be answered by the Board is therefore whether the first auxiliary request constitutes an amendment of the respondents' case.

An amendment to a party's appeal case under Article 13 RPBA 2020 is in analogy with Article 12(4) RPBA 2020 (with reference to Article 12(2) RPBA 2020) a submission which is not directed to the requests, facts, objections, arguments and evidence relied on by the party in its statement of grounds of appeal or its reply. In other words: it goes beyond the framework established therein (see T 247/20, point 1.3 of the Reasons; see also Case Law, V.A.4.2.2 m)).

- 6.2.1 As noted above (see point X.), claim 1 of the first auxiliary request was restricted with respect to claim

1 as granted in that the first compounding ingredient was barium sulfate (i.e. the alternative ingredients "calcium carbonate, magnesium oxide, aluminum oxide" were deleted). In addition, dependent claim 3 as granted was deleted and the dependencies in the remaining claims were adapted.

6.2.2 According to the respondents, the deletion of alternatives within a claim is a mere restriction of the claimed subject-matter and does not constitute an amendment to the party's appeal case within the meaning of Article 13 RPBA 2020 (reference was made to T 914/18, point 4.1 of the reasons).

6.2.3 As regards the question whether the first auxiliary request is an amendment or not, the present Board endorses the line of case law set out in T 0713/14 (points 4.2 and 4.3 of the reasons), T 0494/18 (point 1.4 of the reasons), T 2091/18 (points 4.1 and 4.2 of the reasons), T 2920/18 (point 3.6 of the reasons) or T 2295/19 (point 3.4 of the reasons) which likewise concerned deletions of claims or of alternatives embodiments within claims and regarded them as amendments. In essence, it was found that a new request filed subsequently with a set of claims which is different to that of the previous request is an amendment to the party's case in view of the definition in point 6,2, above. As this is the case for the first auxiliary request it is an "amendment to a party's appeal case" within the meaning of Article 13 RPBA 2020.

6.3 The second question to be answered is whether there are exceptional circumstances, supported by cogent reasons, which justify the admittance of the first auxiliary request into the appeal proceedings.

6.3.1 According to the respondents, the first auxiliary request was filed in reaction to the Board's preliminary view that granted claim 1 did not involve an inventive step over D9. The deletion of the alternatives "calcium carbonate, magnesium oxide, and aluminum oxide" would neither entail a thorough re-evaluation of the matters at issue nor alter the factual and legal scope of the proceedings, but would rather address the objections raised (fully taking into account the Board's preliminary opinion) in a procedurally efficient way. In particular, the positive opinion of the Board with regard to the inventive step of granted claim 2 would apply to claim 1 of the first auxiliary request. This would constitute an "exceptional circumstance" as specified under Article 13(2) RPBA.

6.3.2 The Board cannot follow the respondents' line of argument for the following reasons:

The first auxiliary request was filed in reaction to the Board's preliminary opinion that granted claim 1 did not involve an inventive step over D9. However, the preliminary opinion did not contain any new objection which was not already present in the proceedings. Indeed, the filing of a set of claims in which granted claim 1 was further limited would already have been possible and reasonable with the rejoinder to the statement of grounds of appeal in response to the same objection raised in the statement of grounds of appeal (see point IV), i.e. it was not triggered in the present case by subsequent developments in the appeal proceedings.

The respondents further argued that the first auxiliary request simplified the procedure thereby justifying the presence of exceptional circumstances.

The Board notes that the set of claims as granted was directed to:

- (a) rubber compositions (independent claims 1 and 2 and dependent claim 3 to 5),
- (b) molded rubber products formed from the said rubber compositions (independent claim 6),
- (c) seals for a bearing formed from the said rubber compositions (independent claim 7 and dependent claim 8) (reference is made to above point X. for the exact wording of the claims).

Moreover the claims as granted can be divided in two non-overlapping embodiments:

- (i) claims 1 and 3 (completely) and claims 4 and 6 to 8 (partially) covering rubber compositions wherein "the composition does neither comprise carbon black nor a silica" and products comprising the same
- (ii) claims 2 and 5 (completely) and claims 4 and 6 to 8 (partially) covering rubber compositions comprising carbon black or a silica "in an amount of more than 0 parts by mass and less than or equal to 50 parts by mass" and products comprising the same.

In the previous assessment of inventive step, the Board came to the conclusion that granted claim 1

corresponding to embodiment (i) lacked an inventive step over D9 as the closest prior art. Conversely it was held that the subject-matter of granted claim 2 corresponding to embodiment (ii) involved an inventive step over the same document.

In the first auxiliary request the respondents limited the scope of embodiment (i) to the use of barium sulfate as first compounding ingredient (maintaining embodiment (ii) unchanged). In the Board's view, the limitation of embodiment (i) proposed in the first auxiliary request does not simplify the procedure in the sense that it would immediately overcome the objection of lack of inventive step. While it is not unreasonable for the respondents to consider that the limitation of claim 1 to barium sulfate could potentially overcome the appellant's objection of lack of inventive step, the Board considers that a discussion as to the inventive step of present claim 1 could not be avoided. This is in particular the case because granted claim 2 (found inventive by the Board) and new claim 1 do not overlap, so that a conclusion reached on the former cannot be held to be automatically valid for the latter. In view of this, it cannot be held that the first auxiliary request does not alter the factual or legal framework of the proceedings, nor that there is no need for a re-weighting of the subject of the proceedings (see by contrast the situation for the second auxiliary request, point 7.3.3, below), which situation may be held to constitute exceptional circumstances. In view of this, the Board cannot recognise any exceptional circumstances justifying the admittance of the first auxiliary request into the appeal proceedings.

6.4 Consequently, in the absence of exceptional circumstances, the first auxiliary request is not taken into account (Article 13(2) RPBA 2020).

Second auxiliary request (filed with letter of 10 May 2023)

7. Admittance

7.1 The second auxiliary request was also filed with the respondents' letter of 10 May 2023. Likewise, its admittance is governed by Article 13(2) RPBA 2020.

7.2 The second auxiliary request differs from the granted set of claims in that granted claims 1 and 3 were deleted. In application of the principles mentioned for the first auxiliary request (see point 6.2.3 of the decision), the Board considers that the second auxiliary request is an "amendment to a party's appeal case" within the meaning of Article 13 RPBA 2020.

7.3 It remains to be evaluated whether there are exceptional circumstances, supported by cogent reasons, which justify the admittance of the second auxiliary request into the appeal proceedings.

7.3.1 According to the respondents, the second auxiliary request was filed in reaction to the Board's preliminary opinion that granted claim 1 did not involve an inventive step over D9. The deletion of granted claims 1 and 3 would merely reduce the complexity of the proceedings by eliminating one of the matters in dispute. This would constitute an "exceptional circumstance" within the meaning of Article 13(2) RPBA 2020.

7.3.2 The appellant held that the successful objection of lack of inventive step had been on file throughout the proceedings. Thus the second auxiliary request could and should have been submitted at the latest with the rejoinder to the statement of grounds of appeal. The appellant further argued that the second auxiliary request was not converging with the lower ranking auxiliary requests.

7.3.3 The Board does not dispute that the successful objection of lack of inventive step against granted claim 1 was present at least from the onset of the appeal proceedings. Thus, the filing of a set of claims in which granted claims 1 and 3 were deleted would already have been possible and reasonable with the rejoinder to the statement of grounds of appeal.

However, in similar cases, some Boards have acknowledged exceptional circumstances when the admittance of the amendments was neither detrimental to procedural economy, nor to the convergent approach laid down in the RPBA, nor to the legitimate interests of a party to the proceedings. This specific procedural situation was considered an "exceptional circumstance" within the meaning of Article 13(2) RPBA 2020 (see T 1598/18, point 25.1 of the Reasons; T 1294/16, points 18.3 and 19 of the Reasons; T 339/19, point 1.5 of the Reasons; T 2920/18, points 3.13 to 3.15 of the Reasons; T 2295/19, points 3.4.12 to 3.4.14 of the Reasons). The Board agrees with this approach and finds it applicable to the present case.

(a) As noted above, the granted set of claims consists of non-overlapping embodiments (i) and (ii) (see point 6.3.2 of the decision).

Under inventive step (see point 4.1.3 of the decision), the Board came to the conclusion that granted claim 1 (corresponding to embodiment (i)) lacked an inventive step but that granted claim 2 (corresponding to embodiment (ii)) involved an inventive step over D9 as the closest prior art. With the deletion of granted claims 1 and 3 in the second auxiliary request, embodiment (i) is entirely deleted so that the successful objection of lack of inventive step over D9 is no longer relevant. Furthermore, the question of inventive step over D9 does not need to be further discussed as the corresponding objection against granted claim 2 (or more generally embodiment (ii)) was fully addressed within the framework of the main request.

- (b) Furthermore the deletion of granted claims 1 and 3 simplifies the procedure since the following pending issues do not need to be addressed anymore:

objections of lack of novelty of granted claim 1 over each of the documents D2 and D4 to D6.

- (c) The remaining claims of the second auxiliary request have already been discussed in detail by the parties in their written submissions, so that the appellant's legitimate interests are not adversely affected by that change of case. Thus, the second auxiliary request neither altered the factual or legal framework of the proceedings, nor was there a need for a re-weighting of the subject of the proceedings.
- (d) Finally, the second auxiliary request is converging with the higher ranking requests. The question

whether the lower ranking requests are diverging or not is in itself not relevant for the admittance of the second auxiliary request, as these requests could become relevant only if the second auxiliary request is not admitted or considered unallowable.

7.3.4 For these reasons, which in the Board's view constitute exceptional circumstances within the meaning of Article 13(2) RPBA 2020, the Board made use of its discretion pursuant to Article 13(2) RPBA 2020 by admitting the second auxiliary request into the proceedings.

8. Article 123(2) EPC

8.1 Claim 1

8.1.1 The appellant is of the opinion that the subject-matter of claim 1 of the second auxiliary request (corresponding to claim 2 as granted) finds no basis in the application as filed. In particular the specification as well as the claims of the original application would neither disclose that acrylic rubber is a preferred rubber component nor that an acrylic rubber composition may comprise barium sulfate in an amount from 50 to 200 parts by mass as well as carbon black and/or silica in an amount of more than 0 parts by mass and less than or equal to 50 parts by mass.

8.1.2 In this regard, the Board agrees with the opposition division and the respondents (see contested decision, point 1.1 of the reasons and rejoinder, paragraph III.1.1).

Original claim 3 discloses all features of claim 1 with the exception of the acrylic rubber (as rubber component). However, paragraph [0028] of the original

description teaches that the rubber component may include an acrylic rubber (selection from a list of alternative rubbers). Furthermore, paragraph [0034] even mentions the use of acrylic rubber alone.

In the Board's view, the subject-matter of claim 1 is clearly and directly derivable from the combination of:

original claim 3 (wherein the rubber component is not specified) with

paragraphs [0028] and [0034] of the description as filed (which disclose that the rubber component can be an acrylic rubber).

For the sake of completeness, the appellant appears to contest the fact that different parts of the application as filed (such as the description and the claims) may be combined. However, a general prohibition of such combinations is contrary to the current practice at the EPO. While the Board does not dispute that there may be situations where different parts of the application as filed cannot be combined (e.g. where they relate to different embodiments), the appellant has not explained why such a combination would be problematic in the present case.

8.1.3 Consequently, claim 1 of the second auxiliary request complies with the requirements of Article 123(2) EPC.

8.2 Claims 4 to 6

8.2.1 Claims 4 to 6 of the second auxiliary request (corresponding to granted claims 6 to 8) refer back to claims 1 to 3. The appellant holds that the combination

of any of the claims 4 to 6 with the features of claims 2 and/or 3 has no basis in the application as filed.

In particular original claims 4 and 5, on which present claims 4 and 5 are based, would explicitly refer back to original claims 1 to 3 only. However the features of present claims 2 and 3 are not disclosed in original claims 1 to 3. The same would apply to the part of description disclosing the features of present claims 4 and 5 (see paragraphs [0013] and [0014]).

- 8.2.2 In this regard, the Board also agrees with the opposition division and the respondents (see contested decision, point 1.2 of the reasons and rejoinder, paragraph III.1.2).

As acknowledged by the parties, the features of present claims 2 and 3 find support in paragraphs [0024] and [0025] of the original application. In fact, the ranges disclosed in these claims are clearly preferred embodiments of the application as filed. Likewise the features of present claims 4 and 5 are directly derivable from original claims 4 and 5.

In the Board's view, the combination of present claims 4 or 5 with the features of present claims 2 and/or 3 is clearly and directly derivable from the combination of:

original claims 4 and 5 (disclosing the features of present claims 4 and 5) with

paragraphs [0024] and [0025] of the description as filed (disclosing the preferred ranges for the amounts of the first and second compounding ingredients).

Both parties did not specifically address claim 6 of the second auxiliary request (corresponding to granted claim 8), so that no clear argument was presented during the appeal proceedings with respect to this claim. For the sake of completeness, the Board merely notes that claim 6 finds basis in paragraphs [0019] and [0023] of the application as filed.

8.2.3 Consequently, claims 4 to 6 of the second auxiliary request comply with the requirements of Article 123(2) EPC.

9. Novelty

9.1 According to the appellant, the description of D7 discloses an ethylene-acrylate elastomer corresponding to an acrylic rubber according to present claim 1 (see column 2, lines 45 to 52). Furthermore, the amounts of barium sulfate and carbon black in the examples of table V would fall under the scope of this claim. Consequently, the subject-matter of claim 1 of the second auxiliary request would be anticipated by the whole disclosure of D7.

9.2 With regard to D7, the Board notes that the examples comprise a styrene-butadiene rubber which is not derived from an acrylic monomer and therefore is clearly not an acrylic rubber (see D7, column 10, lines 10-17). Consequently the examples of D7 do not anticipate the subject-matter of claim 1.

Also the general description of D7 does not anticipate the subject-matter of claim 1. Although it mentions an ethylene-acrylate elastomer (see D7, column 2, line

52), said elastomer is not part of a composition comprising the other ingredients of claim 1.

While it is sometimes possible to combine examples with the general part of the description to attack novelty, this is generally not the case and could only be possible in certain circumstances, e.g. when a specific missing feature is not explicitly disclosed in the examples (see Case Law, I.C.4.2). However, for the purposes of a lack of novelty objection, it is generally not permissible to modify the explicit disclosure of examples which clearly do not attack novelty by arbitrarily replacing a feature of the examples with another feature taken from the description. In the present case in particular, it has not been shown how an embodiment corresponding to specific examples modified by arbitrarily replacing the rubber with another non exemplified rubber generically mentioned in a long list of alternatives in the description could be considered as directly and unambiguously derivable from the disclosure of D7.

9.3 Consequently the subject-matter of claim 1 of the second auxiliary request is novel over document D7.

10. Inventive step

10.1 In the statement of grounds of appeal (see pages 10 to 15), the appellant raised objections of lack of inventive step starting from D9 or D19 as the closest prior art.

10.2 Document D9 as the closest prior art

The objection based on D9 against granted claim 2 (corresponding to claim 1 of the second auxiliary

request) was dealt with in the context of the main request and the Board concluded that the subject-matter of this claim involved an inventive step over D9 as the closest prior art (see point 4.1.3 (b) of the decision).

10.3 Document D19 as the closest prior art

10.3.1 In the statement of grounds of appeal (see page 12, sixth paragraph to page 13, fourth paragraph), the appellant raised an objection of lack of inventive step based on document D19 as the closest prior art. It is undisputed that said objection was not part of the opposition proceedings.

10.3.2 The respondents request that the present objection not be admitted into the proceedings.

10.3.3 According to Article 12, paragraph (6) RPBA 2020, the Board shall not admit objections which should have been submitted, or which were no longer maintained, in the proceedings leading to the decision under appeal, unless the circumstances of the appeal case justify their admittance.

10.3.4 The appellant takes the view that the new objection should be treated as new arguments but not as new facts within the meaning of Article 114(2) EPC. The EPC would not provide a basis for rejecting late-filed arguments.

10.3.5 With reference to Article 114(2) EPC the Board may disregard *facts or evidence* which were not submitted in due time by the parties concerned. In the Board's view, an objection of lack of inventive step may include an allegation of new facts (i.e. factual information or a circumstance on which a party bases its case), which

can be disregarded under Article 114(2) EPC (see e.g. J 14/19, points 1.6 and 1.7 of the reasons and T 482/18, point 1.2.5 e) of the reasons). This is the case for instance if the piece of evidence was previously submitted for a different objection. Filing a piece of evidence does not mean that any alleged fact or objection potentially derivable from that evidence is also automatically introduced into the proceedings. In the present case, the objection at issue clearly includes new facts such as an evaluation of the distinguishing features between the subject-matter of claim 1 and the disclosure of D19, which were not part of the opposition proceedings.

10.3.6 Moreover, the appellant did not explain why the present objection could not be raised in the opposition proceedings. In view of the fact that document D19 was part of the opposition proceedings, the Board is of the opinion that the present objection should have been submitted before the opposition division and does not identify any circumstances of the appeal case which justify its admittance.

10.3.7 Under these circumstances, the Board finds it appropriate to exercise its discretion under Article 12(6) RBPA 2020 by not admitting the objection of lack of inventive step starting from D19 as the closest prior art.

11. As all objections to the second auxiliary request are either unsuccessful or not admitted, the patent is to 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 opposition division with the order to maintain the patent on the basis of the claims 1 to 6 according to the second auxiliary request, filed with letter of 10 May 2023 after any necessary consequential amendment of the description.

The Registrar:

The Chairman:



D. Hampe

D. Semino

Decision electronically authenticated