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**Datasheet for the decision
of 13 July 2022**

Case Number: T 2615/19 - 3.3.02

Application Number: 12783249.1

Publication Number: 2775838

IPC: A01N37/08, A01N65/00,
A01N25/04, A01N37/36,
A01N65/06, A61K9/00, A61K47/10,
A61K9/08, A61K31/192,
C08L93/00, D21H21/36, A01P1/00,
A61K36/13, B27K3/15

Language of the proceedings: EN

Title of invention:

AQUEOUS ANTIMICROBIAL COMPOSITION CONTAINING CONIFEROUS RESIN
ACIDS

Patent Proprietor:

Patolab Oy

Opponent:

Nordic Biotech Group Oy

Headword:

Relevant legal provisions:

EPC Art. 56, 123(2)

EPC R. 103(4)(c)

RPBA Art. 12(4)

Keyword:

Inventive step - (no)

Auxiliary request - amendments - allowable (no)

Auxiliary request withdrawn before first instance - admitted
(no)

Partial reimbursement of appeal fee - (yes)

Decisions cited:

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 2615/19 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 13 July 2022

Appellant: Patolab Oy
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 16 July 2019
revoking European patent No. 2775838 pursuant to
Article 101(3) (b) EPC.**

Composition of the Board:

Chairman M. O. Müller
Members: M. Maremonti
P. de Heij

Summary of Facts and Submissions

- I. The appeal by the patentee ("appellant") lies from the opposition division's decision to revoke European patent No. 2 775 838 ("the patent").
- II. The following documents, cited during the opposition proceedings, are referred to in this decision:
- D1: JP 2006-312590
- D22: English translation of D1
- D12: CN 102001934 A
- D25: English translation of D12
- D16a: Södeberg *et al.*, "Antibacterial Activity of Rosin and Resin Acids in Vitro", *Scand. J. Plast. Reconstr. Hand Surg.*, 24, 1990, pages 199 to 205.
- III. The opposition division came to the following conclusion, *inter alia*, on the then pending main request and auxiliary request:
- the subject-matter of claim 1 of the main request and the auxiliary request did not involve an inventive step in view of D1 taken as the closest prior art.
- IV. With its statement of grounds of appeal, the appellant filed sets of claims according to a main request and auxiliary requests 1 to 3.
- V. The parties were summoned to oral proceedings.
- VI. In preparation for the oral proceedings, the board issued a communication pursuant to Article 15(1) RPBA 2020 dated 21 February 2022. In this communication, the board raised questions as regards

the inventive step of the subject-matter claimed in the main request and in auxiliary request 2, especially in view of the combination of documents D1 and D12.

Moreover, it expressed the preliminary opinion that auxiliary request 1 infringed Article 123(2) EPC and that auxiliary request 3 should not be admitted into the proceedings.

- VII. The appellant replied to the board's communication by letter dated 4 March 2022. It stated that it would not attend the oral proceedings and that it withdrew its request for oral proceedings. No arguments as regards patentability of the claimed subject-matter, especially in view of the board's preliminary opinion, were filed.
- VIII. Thereafter the board cancelled the oral proceedings.
- IX. In a subsequent letter, the opponent ("respondent") replied to the board's preliminary opinion.
- X. Final requests

The appellant requested in writing that the appealed decision be set aside and that the patent be maintained on the basis of the claims of the main request. Alternatively, it requested that the patent be maintained on the basis of the claims of one of auxiliary requests 1 to 3. All the requests were filed with the statement of grounds of appeal. The appellant also requested reimbursement of the appeal fee.

The respondent requested in writing that the appeal be dismissed. It also requested that auxiliary request 3 not be admitted into the proceedings.

Moreover, it also requested that the arguments put forward by the appellant in the statement of grounds of appeal that the presence of hydroxylated derivatives of dehydroabiestic acid increased the antimicrobial activity with respect to the presence of only

dehydroabietic acid not be admitted into the proceedings.

As regards this last request, the board came to its final decision in favour of the respondent, also considering these arguments by the appellant. As a consequence, it was not necessary for the board to make a decision on the admittance of these arguments.

XI. The appellant's submissions relevant to the present decision are summarised as follows. For further details, see the corresponding points below under the reasons for the decision.

- The subject-matter of claim 1 of all the claim requests involved an inventive step in view of document D1 taken as the closest prior art.
- Moreover, the subject-matter of claim 1 of auxiliary request 1 was based on claim 3 as filed and thus complied with Article 123(2) EPC.

XII. The respondent's submissions relevant to the present decision are summarised as follows.

- The subject-matter of claim 1 of the main request and auxiliary request 2 did not involve an inventive step when starting from D1 as the closest prior art, in view of the teaching contained in document D12.
- The amendments made to claim 1 of auxiliary request 1 resulted in the addition of subject-matter that was not disclosed in the application as filed, contrary to the requirements of Article 123(2) EPC.
- Auxiliary request 3 had been filed and then withdrawn before the opposition division. Therefore, it should not be admitted into the

proceedings under the Rules of Procedure of the Boards of Appeal.

Reasons for the Decision

Main request - claim 1 - ground for opposition under Article 100(a) EPC - inventive step under Article 56 EPC

1. Claim 1 of the main request reads as follows:

"1. An aqueous antimicrobial composition comprising coniferous resin acids, a dispersing agent and an aqueous medium, wherein the amount of the coniferous resin acids of the composition is in the range of 1 to 100 ppm, the coniferous resin acids comprise 7 β -hydroxydehydroabietic acid, 7 α -hydroxydehydroabietic acid, 15-hydroxydehydroabietic acid, 7 β ,15-dihydroxydehydroabietic acid or 7 α ,15-dihydroxydehydroabietic acid, and are provided as resin of coniferous trees or as a resin acid fraction of tall oil obtained from kraft pulping of coniferous trees, and the dispersing agent is selected from a group consisting of polyhydric alicyclic alcohol, polyhydric aliphatic alcohol, dimethyl sulfoxide, acetone, protein-containing aqueous liquid, sugar-containing aqueous liquids, serum, plasma, liquid used in cell and tissue cultures and a mixture thereof."

2. Closest prior art

2.1 In line with the appealed decision (page 17), both parties indicated document D1 (or its English translation, D22) as the closest prior art for the claimed subject-matter. In view of the compositions disclosed in D1, the board has no reason to take a different stance.

2.2 D1 (hereinafter reference is made to D22, the English translation of D1) discloses (paragraphs [0008], [0010], [0011], [0016], [0017] and [0019], and examples 1, 3, 5, 6 and 9) mouthwash compositions to be used for preventing or treating periodontal diseases. This use implies that the disclosed compositions are antibacterial. The disclosed compositions comprise, *inter alia*, a disproportionated rosin containing 40% by weight or more of dehydroabietic acid in an amount from 0.001 to 20% by weight. The resulting amount of dehydroabietic acid overlaps with the claimed range of the amount of the coniferous resin acids. In particular, the mouthwash composition in example 3 in D1 contains 0.01% by weight (100 ppm) of dehydroabietic acid-containing disproportionated rosin, thus resulting in a dehydroabietic acid amount falling within the claimed range. Moreover, the compositions in D1 also comprise a non-ionic surfactant, water and a wetting agent. The latter can in particular be selected from glycerol, sorbitol, polypropylene glycol, xylitol and mannitol. These substances correspond to the dispersing agent as defined in claim 1.

3. Distinguishing features

As set out by the board in its communication under Article 15(1) RPBA (point 7.2), the subject-matter of claim 1 differs from the compositions of D1 in the presence of at least one of 7 β -hydroxydehydroabietic acid, 7 α -hydroxydehydroabietic acid, 15-hydroxydehydroabietic acid, 7 β ,15-dihydroxydehydroabietic acid or 7 α ,15-dihydroxydehydroabietic acid. The appellant did not contest that this feature was the sole feature distinguishing the subject-matter of claim 1 from D1.

4. Objective technical problem

4.1 The appellant argued (statement of grounds of appeal, page 7, fifth paragraph) that the presence of the resin acids recited in claim 1 increased the antimicrobial activity of the composition as compared with the sole presence of dehydroabietic acid. The appellant based its argument on example 1 in the patent. In this example, a composition comprising 0.7 ppm dehydroabietic acid and 37.3 ppm of acids as defined in claim 1 was tested for its antimicrobial characteristics. The appellant argued that the composition in this example exhibited high antimicrobial activity even though it contained only 0.7 ppm of dehydroabietic acid (table 1 on page 6 of the patent). Document D16a confirmed that, for dehydroabietic acid, antimicrobial activity had only been disclosed for concentrations of 8 ppm or higher. The appellant then concluded that the antimicrobial activity in example 1 of the patent was not to be ascribed to dehydroabietic acid, but to the resin acids listed in claim 1 and present in the composition in this example.

4.2 However, the board notes that, while the appellant's conclusion may be true for the composition in example 1, this does not prove any technical effect of the claimed compositions over the compositions disclosed in D1. In fact, here (point 2.2 above), concentrations of dehydroabietic acid much higher than the 0.7 ppm in example 1 have been used. Document D16a (tables III to VII) confirms that, at concentrations as high as those used in D1, dehydroabietic acid does exhibit antimicrobial activity. According to D16a (last paragraph on page 204), dehydroabietic acid is in fact the most effective antimicrobial compound of the resin acids of the rosin tested.

- 4.3 According to the problem-solution approach, a technical effect, if any, has to derive from the distinguishing feature over the closest prior art. No improvement of the claimed compositions in terms of antimicrobial activity has been demonstrated over the compositions known from D1.
- 4.4 In the absence of any technical effect, the objective technical problem lies in providing an alternative antimicrobial composition. It should be noted that this conclusion was already reached in the board's communication under Article 15(1) RPBA (points 7.3.3 and 7.3.4) and has not been challenged by the appellant.
5. Obviousness of the claimed solution
- 5.1 As a solution to the posed technical problem, claim 1 defines a composition including at least one of 7 β -hydroxydehydroabietic acid, 7 α -hydroxydehydroabietic acid, 15-hydroxydehydroabietic acid, 7 β ,15-dihydroxydehydroabietic acid or 7 α ,15-dihydroxydehydroabietic acid.
- 5.2 The respondent put forward that it was known from document D12 that hydroxylated derivatives of dehydroabietic acid, especially 7-hydroxy dehydroabietic acid, exhibited antimicrobial activity. The appellant argued that a general statement in D12 that hydroxylated derivatives had various biological activities did not provide teaching that the specific derivatives recited in claim 1 had antimicrobial activity. It was not inevitable in view of the teaching of D12 that hydroxylated forms of dehydroabietic acid exhibited antibacterial activity.
- 5.3 The board finds the appellant's argument unconvincing. D12 (reference is made to passages of D25, the English translation of D12) discloses (page 1) a method for

preparing 7-hydroxy dehydroabietic acid from rosin to be used as a pharmaceutical intermediate compound. As set out in the board's communication under Article 15(1) RPBA (point 7.4.5) and not contested by the appellant, 7-hydroxy dehydroabietic acid is one of the specific resin acids mentioned in claim 1. According to D12, 7-hydroxy dehydroabietic acid is a rosin acid derivative originating from the oxidation reaction of rosin. Such dehydroabietic acid derivatives are stated in D12 to have various biological activities such as antimicrobial activity (page 1, 23rd line from the bottom). Therefore, D12 directly and unambiguously discloses to the skilled person that dehydroabietic acid derivatives, especially 7-hydroxy dehydroabietic acid as recited in claim 1, possess antimicrobial activity.

5.4 On the basis of the above teaching in document D12, the inclusion of 7-hydroxy dehydroabietic acid in the compositions in D1, either by replacing dehydroabietic acid or as an additional component, represents an obvious possibility that the skilled person would have considered when aiming to solve the posed technical problem. By doing this, the skilled person would have arrived at the claimed composition without exercising any inventive skill.

5.5 Therefore, the board concludes that the subject-matter of claim 1 does not involve an inventive step within the meaning of Article 56 EPC in view of D1 taken as the closest prior art in combination with D12. As a consequence, the appellant's main request is not allowable.

Auxiliary requests

6. Auxiliary request 1 - added subject-matter under Article 123(2) EPC
- 6.1 In claim 1 of auxiliary request 1, the resin acids are stated as comprising "*a mixture of 7 β -hydroxydehydroabietic acid, 7 α -hydroxydehydroabietic acid, 15-hydroxydehydroabietic acid, 7 β ,15-dihydroxydehydroabietic acid and 7 α ,15-dihydroxydehydroabietic acid*".

The respondent objected to the above amendment under Article 123(2) EPC.

- 6.2 The appellant submitted that the amendment was based on claim 3 as filed. In particular, the expression "*a mixture thereof*" at the end of claim 3 as filed had to be read as "*any mixture thereof*", thus indicating that any arbitrary mixture of the resin acids listed in the claim was covered, including a mixture of all the acids cited in claim 1 of auxiliary request 1.
- 6.3 The board disagrees. The list of the resin acids mentioned in claim 3 as filed also contains, in addition to the acids recited in claim 1 of auxiliary request 1, dehydroabietic acid, 18-hydroxydehydroabietic acid and further hydroxylated derivatives of dehydroabietic acid. These components have been deleted from claim 1 of auxiliary request 1. Therefore, the amendment made to claim 1 results in singling out a specific mixture of five resin acids, which mixture, as such, is not directly and unambiguously disclosed in the application as filed. Therefore, the requirements of Article 123(2) EPC are not met. As a consequence, auxiliary request 1 is not allowable.

7. Auxiliary request 2

7.1 Auxiliary request 2 contains an independent claim 8 directed to a pharmaceutical formulation comprising an antimicrobial composition as defined in claim 1 and "*pharmaceutically acceptable diluent, carrier and/or excipient*". The composition defined in claim 1 of auxiliary request 2 corresponds to the composition defined in claim 1 of the main request (point 1 above).

7.2 The compositions known from D1 (point 2.2 above) also include water, which represents a "*pharmaceutically acceptable diluent*". It follows that the subject-matter of claim 8 of auxiliary request 2 differs from the compositions of D1 on account of the same sole feature as mentioned above for claim 1 of the main request (point 3). Therefore, the board's observations as regards lack of inventive step of claim 1 of the main request apply, *mutatis mutandis*, to claim 8 of auxiliary request 2. Therefore, the subject-matter of claim 8 of auxiliary request 2 does not involve an inventive step within the meaning of Article 56 EPC. As a consequence, auxiliary request 2 is not allowable.

8. Auxiliary request 3

8.1 Auxiliary request 3 represents a combination of auxiliary requests 1 and 2.

8.2 As pointed out by the respondent and not contested by the appellant, auxiliary request 3 is identical to auxiliary request 3, filed by the appellant on 25 April 2019. This auxiliary request was explicitly withdrawn by the appellant during oral proceedings before the opposition division; see the minutes of oral proceedings, page 4 at 11.35 hrs.

8.3 Under Article 12(4) RPBA 2007, the board has the power to hold inadmissible, *inter alia*, requests which could

have been presented in the first-instance proceedings. There can be no doubt that auxiliary request 3 could have been submitted in the first-instance proceedings, since it was in fact submitted in those proceedings.

- 8.4 By withdrawing auxiliary request 3, the appellant has avoided a decision by the opposition division on this request. Therefore, the board decides that auxiliary request 3 is not admitted into the proceedings pursuant to Article 12(4) RPBA 2007.
9. For the reasons set out above, none of the appellant's claim requests is admissible and allowable.

Reimbursement of the appeal fee

10. According to Rule 103(4)(c) EPC, the appeal fee shall be reimbursed at 25% if any request for oral proceedings is withdrawn within one month of notification of the communication issued by the board in preparation for the oral proceedings, and no oral proceedings take place.
11. The appellant withdrew its request for oral proceedings on 4 March 2022, i.e. within one month of notification of the communication dated 21 February 2022 issued by the board in preparation for the oral proceedings. Thereafter, the board cancelled the oral proceedings, meaning that no oral proceedings took place in the case at hand.
12. It follows that the requirements of Rule 103(4)(c) EPC for a reimbursement of the appeal fee at 25% have been met.

Order

For these reasons it is decided that:

1. The appeal is dismissed.
2. The appeal fee is reimbursed at 25%.

The Registrar:

The Chairman:



N. Maslin

M. O. Müller

Decision electronically authenticated