# BESCHWERDEKAMMERN DES EUROPÄISCHEN PATENTAMTS

# BOARDS OF APPEAL OF THE EUROPEAN PATENT OFFICE

CHAMBRES DE RECOURS DE L'OFFICE EUROPÉEN DES BREVETS

#### Internal distribution code:

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

# Datasheet for the decision of 10 November 2022

Case Number: T 1182/20 - 3.3.09

Application Number: 12876407.3

Publication Number: 2846637

IPC: A23L3/3508, A23L3/3526,

A23B4/12, A01N37/02, C07C233/00

Language of the proceedings: EN

#### Title of invention:

Synergistic antimicrobial agents

#### Patent Proprietor:

Nevada Naturals, Inc.

#### Opponent:

Laboratorios Miret, S.A.

#### Headword:

Synergistic antimicrobial agents/NEVADA NATURALS

# Relevant legal provisions:

EPC Art. 54(1), 84 RPBA 2020 Art. 13(2)

# Keyword:

Novelty - main request (no) - auxiliary requests (no) Claims - clarity in opposition appeal proceedings - clarity auxiliary requests (no) Amendment after summons - taken into account (no)

# Decisions cited:

G 0003/14



# 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 1182/20 - 3.3.09

DECISION of Technical Board of Appeal 3.3.09 of 10 November 2022

Appellant: Laboratorios Miret, S.A. Pol. Industrial Can Parellada

(Opponent) c/ Geminis, no. 4

08228 Les Fonts de Terrassa, Barcelona (ES)

Representative: Gille Hrabal Partnerschaftsgesellschaft mbB

> Patentanwälte Brucknerstraße 20 40593 Düsseldorf (DE)

Respondent: Nevada Naturals, Inc.

13505 Trail Vista Court NE (Patent Proprietor)

Albuquerque, NM 87111 (US)

Representative: Forresters IP LLP

Skygarden

Erika-Mann-Straße 11 80636 München (DE)

Decision under appeal: Interlocutory decision of the Opposition

> Division of the European Patent Office posted on 13 March 2020 concerning maintenance of the European Patent No. 2846637 in amended form.

#### Composition of the Board:

A. Haderlein Chairman Members: C. Meiners

N. Obrovski

- 1 - T 1182/20

#### Summary of Facts and Submissions

- I. This decision concerns the appeal filed by the opponent (appellant) against the interlocutory decision of the opposition division finding that, on the basis of the sixth auxiliary request filed by letter of 4 December 2019, the patent in suit ("the patent") met the requirements of the EPC.
- II. In its notice of opposition, the opponent had requested that the patent be revoked in its entirety based, *inter alia*, on the ground for opposition under Article 100(a) EPC in combination with Article 54 EPC (lack of novelty).
- III. The following document submitted during the opposition proceedings is relevant for the decision:

D4 WO 2011/105985 A1

- IV. In its decision, the opposition division found, inter alia, that the sixth auxiliary request was novel over D4.
- V. With its reply to the opponent's statement of grounds of appeal, the patent proprietor (respondent) indicated that the sixth to tenth auxiliary requests submitted by letter of 4 December 2019 were its valid requests.
- VI. The board summoned the parties to oral proceedings and issued a communication under Article 15(1) RPBA 2020 in which it set out its preliminary opinion.

- 2 - T 1182/20

- VII. Together with a letter dated 14 October 2022, the respondent filed a further auxiliary request, designated "Tenth auxiliary request claims". In the oral proceedings held before the board, the respondent clarified that this request was in fact to be considered its eleventh auxiliary request.
- VIII. Claim 1 of the sixth and ninth auxiliary requests reads as follows:
  - "1. A composition comprising 1) an effective amount of an  $N^{\alpha}$  alkanoyl-dibasic amino acid alkyl ester salt having 8 to 16 carbons in the alkanoyl chain and 1 to 4 carbon atoms in the alkyl chain, and 2) an effective amount of one or more saturated  $C_8-C_{14}$  fatty acid monoglycerides, combined at a synergistically effective antimicrobial ratio in weight of between 9:1 to 1:9, wherein the saturated  $C_8-C_{14}$  fatty acid monoglyceride is glyceryl mono-laurate."

Claim 1 of the seventh and tenth auxiliary requests reads as follows:

"1. A composition comprising 1) an effective amount of an  $N^{\alpha}$  -lauroyl-L-arginine ethyl ester salt, and 2) an effective amount of glyceryl mono-laurate, combined at a synergistically effective antimicrobial ratio in weight of between 9:1 to 1:9, wherein the MIC of the composition is lower than the MIC calculated for an additive effect."

Claim 1 of the eighth auxiliary request is identical to claim 1 of the sixth auxiliary request, except it does not contain the feature "[,] wherein the saturated  $C_8$ -  $C_{14}$  fatty acid monoglyceride is glyceryl mono-laurate".

- 3 - T 1182/20

Claim 1 of the eleventh auxiliary request filed on 14 October 2022 differs from claim 1 of the main request (sixth auxiliary request) by a weight ratio of components 1) and 2) of between 8.5:1.5 and 1:4.

IX. The appellant's arguments, where relevant to the decision, can be summarised as follows:

The subject-matter of the independent claims of the sixth auxiliary request lacked novelty vis-à-vis, inter alia, document D4. Similarly, the subject-matter of claim 1 of the eighth and ninth auxiliary requests lacked novelty.

The seventh and tenth auxiliary requests did not meet the requirements of Article 84 EPC. The eleventh auxiliary request should not be admitted into the proceedings.

The respondent's arguments, where relevant to the decision, can be summarised as follows:

The main and auxiliary requests met the requirement of Article 54 EPC. In particular, the expression "based on the weight of the salt" in claim 15 of D4 was ambiguous; it could not be directly and unambiguously derived from this that the wt% mentioned therein referred to the (salt) composition as a whole; rather, interpreting this to refer only to the  $N^{\alpha}$  -lauroyl-L-arginine ethyl ester (LAE) salt was more sensible.

Furthermore, the eleventh auxiliary request should be admitted. It had been submitted as a reaction to the preliminary opinion provided by the board, which unexpectedly contradicted the opinion of the opposition division on novelty.

- 4 - T 1182/20

# X. Requests

The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed and the patent be maintained on the basis of the sixth auxiliary request (i.e. as held allowable by the opposition division) or, alternatively, that the patent be maintained on the basis of one of the seventh to tenth auxiliary requests filed with the letter dated 4 December 2019 or the eleventh auxiliary request filed with the letter dated 14 October 2022 (submitted as the tenth auxiliary request at the time).

#### Reasons for the Decision

- 1. Novelty sixth auxiliary request
- 1.1 The appellant considers the subject-matter of claim 1 of the main request (sixth auxiliary request) to lack novelty in view of D4. This document teaches a "controlled release biocidal salt" comprising a cation as the first component, which, most preferably, is LAE (see page 3, lines 13 to 15, or page 7, lines 20 to 21, cf. also claim 3), and a counter-anion as the second component.
- 1.2 According to D4, for many applications it is desirable that the salts disclosed therein include a saturated  $C_6-C_{14}$  fatty acid monoglyceride such as glycerol

monolaurate. If present, the glycerol monolaurate is utilised in an amount of about 1 to about 10 wt%, based on the weight of the salt (see page 5, lines 8 to 11, of D4 and claim 15).

1.3 The only distinguishing feature relied upon by the respondent vis-à-vis D4 was the weight ratio of the first to the second components as called for in claim 1 of the sixth auxiliary request. In that regard, the respondent argued that what was meant by "based on the weight of the salt" in claim 15, for example, was ambiguous in D4. Whichever interpretation was adopted, the resulting feature combination did not fall within the scope of the claims of the sixth auxiliary request. Claim 1 of D4 was directed to the salt which consisted of the first and second component. The first component comprised the LAE and the second component the anion, as was reflected in claims 3 and 5 of D4. Claim 13 referred back to claim 1. It followed that the glycerol monolaurate (referred to in claim 14) was a further addition to the salt of claim 1 and not a more restricted definition of a component of the salt that was already present. The resulting ratio of the components (glycerol monolaurate and LAE salt) was from 1:100 to 1:10 and thus fell outside the range of claim 1. An alternative interpretation was that if the same solution contained 5% LAE, then an additional 1 to 10 wt.% glycerol monolaurate had to be added, so that the sum of LAE and glycerol monolaurate was 6 to 15%. This option, however, appeared to run contrary to the teaching of D4 according to which the amount of active ingredient had to remain constant. There was no information in D4 supporting the interpretation that if the glycerol monolaurate was added to the composition, the amount of LAE had to be reduced correspondingly. This would mean not keeping the amount of active

- 6 - T 1182/20

ingredient constant and going against the teaching of  $\mathsf{D4}$ .

1.4 In the view of the board, the considerations about adding glycerol monolaurate to compositions of D4 containing 5% LAE (salt) and whether this component should be added on top of 5% LAE (salt) or rather that the amount of LAE should be correspondingly reduced to accommodate the additional component of glycerol monolaurate has no bearing on the interpretation of the disclosure of claims 1 and 13 to 15. The claims relate to a salt and not to a composition comprising 5% of LAE (salt) to which the respondent referred in the context of Table 3, for example, of D4.

In this context, the appellant argued that Example 3 of D4 disclosed a composition comprising glyceryl monolaurate. The board, however, observes that such a speculation was not supported by the teaching of Example 3 and Table 3. By contrast, the expression "LAE-monolaurate" in lines 17 to 18 on page 15 of D4, for example, relates to the (charge-neutral) salt adduct of  $N^{\alpha}$  -lauroyl-L-arginine ethyl ester and lauric acid in equimolar amounts (1:1). This can also be inferred from the indication that LAE-monolaurate contains about 66% of the active LAE cation when taking the molar masses of the salt and its components into account, as was discussed in the oral proceedings before the board. The "monolaurate" is thus a "monomeric anionic molecule" within the meaning of page 3, lines 4 to 6, of D4.

Example 3 of D4 thus teaches to employ the LAE cation and the counter-anion in equimolar amounts. Page 7, lines 20 to 21, of D4, to which the appellant referred, describes the preparation of the LAE (mono) laurate salt

- 7 - T 1182/20

by an acid-base reaction between LAE and lauric acid. In view of these remarks, the board sees no ambiguity arising in the context of the meaning of "equivalency" in respect of the molar ratio between the first component (cation) and the second component (counteranion) of the salts of D4, to which reference is made on page 4, lines 4 to 10. Specific LAE salts featured in D4 include LAE laurate and LAE lactate.

- 1.5 While the board agrees with the respondent that claim 1 of D4 suggests that the salt consists of a first component comprising a cation and a second component comprising an anion as further specified in claim 1, the wording of claim 13 unequivocally discloses that the salt can further comprise a third component, namely a saturated  $C_6-C_{14}$  fatty acid monoglyceride such as glycerol monolaurate (see claim 14). Whether this third component is described in D4 as forming part of the salt or, as in claim 1 of the sixth auxiliary request, as a (separate) component is immaterial to the question of novelty.
- 1.6 In the biocidal salts of D4, the cationic and anionic components a) and b) together constitute the LAE salts, such as LAE laurate (see page 7, lines 20 to 21, and the examples). As argued by the appellant, components a) and b) are typically cations of an  $N^{\alpha}$ -(C<sub>1</sub>-C<sub>22</sub>)alkanoyl di-basic amino acid alkyl (C<sub>1</sub>-C<sub>22</sub>)ester and anions of a monomeric anionic molecule.

Hence, the board does not agree with the respondent's argument that D4 did not disclose how much LAE was present (in the first component).

1.7 Claim 15 of D4 stipulates directly and unambiguously that glycerol monolaurate be present in an amount of

- 8 - T 1182/20

about 1 to about 10 wt.%, based on the weight of the salt. The salt of claim 14, to which claim 15 refers, is a "salt" comprising the first component (designated "a" in section 7.4 of the appealed decision and the statement of grounds of appeal), the second component (designated "b" in the appealed decision), and a further component "c" of the salt which can be glycerol monolaurate. The passage on page 5, lines 8 to 11, of the description of D4 also reflects that the salts can include monoglycerides such as glycerol monolaurate. The board thus concurs with the appellant that D4 directly and unambiguously discloses salts constituted of components a, b, and c (with the sum of a) - c) making up 100 wt.%). However, with the glycerol monolaurate making up 1 to 10 wt.% based on the "salt" (i.e. the ternary blend components of a) to c)), this leaves room for 99 to 90wt.% of components a) + b). Such a "salt" constituted by said cation, said anion and glycerol monolaurate is without doubt a composition within the meaning of claim 1 of the sixth auxiliary request. The subject-matter of claim 1 thus lacks novelty (Article 54(1) EPC).

- 2. Novelty eighth and ninth auxiliary requests
- 2.1 As the subject-matter of claim 1 of the ninth auxiliary request is identical to that of claim 1 of the sixth auxiliary request, the considerations made above in respect of a lack of novelty in view of D4 apply mutatis mutandis. The subject-matter of claim 1 thus lacks novelty vis-à-vis D4 and does not meet the requirements of Article 54(1) EPC.
- 2.2 Since the scope of claim 1 of the eighth auxiliary request contains the same features as claim 1 of the sixth auxiliary request (except for the limitation of

- 9 - T 1182/20

the saturated  $C_8$ - $C_{14}$  fatty acid monoglycerides to glyceryl monolaurate, which is missing from claim 1 of the eighth auxiliary request), it does not meet the requirement of Article 54(1) EPC in view of D4 either and thus lacks novelty as well.

- 3. Clarity of the claims (Article 84 EPC) seventh and tenth auxiliary requests
- 3.1 The amendment "wherein the MIC of the composition is lower than the MIC calculated for an additive effect" was incorporated into claim 1 in the opposition proceedings. It did not form part of the granted claims but finds its basis in the description of the patent and application as filed. The amendment is thus under scrutiny as to the question of its compliance with the requirements of Article 84 EPC (G 3/14).
- 3.2 As claim 1 does not call for a test method for determining a MIC (minimum inhibitory concentration), the scope of claim 1 is undefined as regards this feature. The board therefore endorses the corresponding conclusions put forward in section 4.5 of the opposition division's decision, which apply mutatis mutandis to claim 1 of the seventh and tenth auxiliary requests. In this context, the decision under appeal states that it is part of common general knowledge in the field concerned that the MIC can, for example, be tested as  ${\rm MIC}^{50}$  or  ${\rm MIC}^{90}$  depending on what effect is to be evaluated and that several measurement methods for determining it exist. Consequently, the skilled person is left in the dark as to which method to apply in order to determine whether or not they were working within the ambit of the claims.

- 10 - T 1182/20

Thus, the seventh and tenth auxiliary requests do not comply with Article 84 EPC.

- 4. Admittance of the eleventh auxiliary request filed on 14 October 2022 (Article 13(2) RPBA 2020)
- 4.1 The eleventh auxiliary claim request was submitted by the respondent together with its reply to the communication pursuant to Article 15(1) RPBA 2020 after notification of the summons to oral proceedings before the board. It thus constitutes an amendment to the respondent's appeal case within the meaning of Article 13(2) RPBA 2020.
- 4.2 The respondent argued that the filing of the eleventh auxiliary request had been occasioned by the surprising finding of the board that document D4 anticipated the novelty of the subject-matter of the version of claim 1 held allowable by the opposition division. In the decision under appeal, the novelty of the sixth auxiliary request had only been discussed in view of another document and not D4. Novelty over D4 had already been conceded for the preceding fifth auxiliary request, which did not even claim glycerol monolaurate. The board had surprisingly used a different interpretation of D4 than the opposition division had in the decision under appeal. This line of events qualified as exceptional circumstances within the meaning of Article 13(2) RPBA 2020, justifying the filing of the auxiliary request and its admittance into the proceedings. The claims of the request clearly addressed the novelty issue over D4 raised by the board. Moreover, the amendment introduced into the independent claims had already formed part of the granted dependent claims and therefore part of the opposition proceedings.

- 11 - T 1182/20

- 4.3 The fact that the board, in its communication pursuant to Article 15(1) RPBA 2020, came to a different conclusion than the opposition division cannot be considered an exceptional circumstance within the meaning of Article 13(2) RPBA 2020 (see Case Law of the Boards of Appeal, 10th edition, 2022, V.A.4.5.6.h). The board did not introduce any new objections, but it did consider the objection of a lack of novelty in view of document D4, which had been raised by the appellant in the opposition proceedings against, inter alia, claim 1 of the sixth auxiliary request, persuasive. The respondent thus could and should have filed a corresponding claim request in the opposition proceedings or at least together with its reply to the statement of grounds of appeal.
- 4.4 There are thus no exceptional circumstances justified with cogent reasons by the respondent, as stipulated by Article 13(2) RPBA 2020. The board thus has not taken the eleventh auxiliary request into account (Article 13(2) RPBA 2020).

- 12 - T 1182/20

# Order

# For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked.

The Registrar:

The Chairman:



M. Schalow A. Haderlein

Decision electronically authenticated