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**Datasheet for the decision
of 26 August 2025**

Case Number: T 0878/23 - 3.3.08

Application Number: 16734352.4

Publication Number: 3317395

IPC: C12N1/04, C12N1/20

Language of the proceedings: EN

Title of invention:

Composition suitable for protecting microorganisms

Patent Proprietor:

Société des Produits Nestlé S.A.

Opponents:

Morinaga Milk Industry Co., Ltd.
DSM IP Assets B.V.

Headword:

Composition/SOCIÉTÉ DES PRODUITS NESTLÉ

Relevant legal provisions:

EPC Art. 83
RPBA 2020 Art. 13(2)

Keyword:

Claims as granted (main request) and auxiliary requests 1 to 18 - sufficiency of disclosure - (no)

Late filed auxiliary requests 19 to 32 - admitted into the proceedings - (no)

Question of law referred to the Enlarged Board of Appeal - (no)

Decisions cited:

G 0003/14, T 2290/12

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 0878/23 - 3.3.08

D E C I S I O N
of Technical Board of Appeal 3.3.08
of 26 August 2025

Appellant: Société des Produits Nestlé S.A.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
20 March 2023 concerning maintenance of the
European Patent No. 3317395 in amended form

Composition of the Board:

Chair	T. Sommerfeld
Members:	M. Montrone
	D. Rogers

Summary of Facts and Submissions

- I. European patent No. 3 317 395 B1 ("the patent") was granted for European patent application No. 16 734 352.4 which has been filed as International patent application published as WO 2017/001590.
- II. An opposition was filed against the granted patent. The patent was opposed in its entirety under Article 100(a) EPC (in conjunction with Articles 54 and 56 EPC), 100(b) and 100(c) EPC.
- III. By an interlocutory decision, the opposition division decided that Article 100(a) EPC, in conjunction with Article 56 EPC, prejudiced the maintenance of the patent as granted and that the claims of auxiliary requests 1 to 3 were likewise not allowable for lack of inventive step; but that the patent could be maintained in amended form on the basis of the claims of auxiliary request 4 filed on 11 October 2021.
- IV. The patent proprietor and opponent 01 ("appellants I and II", respectively) appealed this decision.
- V. With their statement setting out the grounds of appeal, appellant I submitted auxiliary requests 1 to 18.
- VI. Claims 1 and 4 as granted (main request) read:

"1. A composition comprising a carrier material comprising a polysaccharide, at least one antioxidant and an amino acid combination selected from
cysteine and alanine;
cysteine, lysine and alanine;
lysine and arginine;

cysteine and arginine;
cysteine, lysine and arginine;
lysine, alanine and arginine; and
cysteine, arginine and alanine; wherein the amino acids
lysine, alanine and arginine are each present in an
amount of 8 to 20 wt.% based on total dry weight of the
composition and wherein cysteine is present in an
amount of 2 to 10 wt.% based on the total dry weight of
the composition."

"4. A composition according to any one of the preceding
claims, characterized in that the total amino acid
concentration is in the range from 3.5 to 36.5 wt%,
based on the total dry weight of the composition."

- VII. With their statement of grounds of appeal, appellant II submitted *inter alia* objections under lack of sufficiency of disclosure against the subject-matter of claim 4 of auxiliary request 4 (i.e. the request maintained in opposition proceedings).
- VIII. Both parties replied to each others' appeals. In addition both parties filed various further submissions with arguments and counter-arguments to their cases.
- IX. Opponent 02, as a party of right, submitted with the letter dated 4 December 2023 that no "*further written submissions*" will be filed at the appeal.
- X. In a communication pursuant to Article 15(1) RPBA, the board provided its preliminary assessment on some of the issues at stake including claim construction and sufficiency of disclosure for all claim requests on file.

- XI. In reply thereto, appellant I submitted further arguments and new auxiliary requests 19 to 32 (AR19 to AR32). In all these new auxiliary requests, *inter alia* claim 4 as granted has been deleted.
- XII. At the oral proceedings, held in the presence of both appellants and in the absence of the party as of right, appellant I submitted one question of law to be referred to the Enlarged Board of Appeal.
- XIII. The arguments of the parties relevant for the decision are dealt with in detail in the Reasons for the Decision.
- XIV. The relevant requests of the parties for the decision are the following (for the complete list of the parties' requests, see the minutes of the oral proceedings):

Appellant I requested:

- that the decision under appeal be set aside and that the patent be maintained as granted (main request), or alternatively that the patent be maintained on the basis of any of auxiliary requests 1 to 18, as submitted with the grounds of appeal, or on the basis of auxiliary requests 19 to 32, as submitted with letter of 17 June 2025;
- that a question of law as submitted during the oral proceedings be referred to the Enlarged Board of Appeal.

Appellant II requested:

- that the decision under appeal be set aside and that the patent be revoked;

- that auxiliary requests 18 to 32 not be admitted/considered in appeal.

The party as of right requested in writing:

- that a decision be taken *"on the basis of the earlier filed submissions"*.

Reasons for the Decision

Claims as granted (main request)

Claim interpretation - claims 1 and 4

1. Claim 1 concerns a product claim.
- 1.1 The claimed composition comprises *"a carrier material comprising a polysaccharide, at least one antioxidant and an amino acid combination selected from"* seven combinations containing two or three amino acids selected from cysteine, alanine, lysine and arginine (*"cysteine and alanine"; "cysteine, lysine and alanine"; "lysine and arginine"; "cysteine and arginine"; "cysteine, lysine and arginine"; "lysine, alanine and arginine"; and "cysteine, arginine and alanine"*). Due to the comprising language the composition of claim 1 may contain further compounds including, for example, other amino acids.
- 1.2 Claim 1 further specifies that the composition contains specified concentrations (amounts) of each of lysine, alanine and arginine (from *"8 to 20 wt.%"*) and cysteine (from *"2 to 10 wt.%"*) based on the composition's total dry weight. Claim 1 thus defines minimum and maximum amounts for each of the four indicated amino acids in the claimed composition.

- 1.3 Since not each of the amino acid combinations mentioned in claim 1 contains all of the four amino acids indicated above (point 1.1), but only a selection thereof, the board agrees with the opposition division (decision under appeal, page 6, second paragraph "Regarding (a)") that the amino acid amounts mentioned in claim 1 (point 1.2 above) refer only to those combinations that contain the respective amino acid(s).
2. Dependent claim 4 further specifies that the composition of claim 1 contains a "total amino acid concentration...in the range from 3.5 to 36.5 wt%, based on the total dry weight of the composition" (emphasis added). Claim 4 adds thus a further limit to the composition as defined in claim 1 concerning the used total minimum and maximum concentration (amount) of amino acids.

Sufficiency of disclosure

3. Article 83 EPC requires that the application discloses the invention in a manner sufficiently clear and complete for it to be carried out by the skilled person. The claimed invention must be sufficiently disclosed on the filing date (Case Law of the Boards of Appeal of the EPO, 11th edition, 2025 (hereafter "Case Law"), II.C.2.) based on the application as a whole (Case Law, II.C.3.1), in consideration of the common general knowledge of the skilled person (Case Law, II.C.4.1.). While at least one way of carrying out the claimed invention must be disclosed, this disclosure is sufficient only if it allows the invention to be performed over substantially the whole range claimed (here the preparation of the claimed composition over

the whole amino acid concentration range; Case Law, II.C.5.2., II.C.5.4 and II.C.7.1.2).

4. It is evident from the claim construction above (points 1.2 and 2), that the minimum concentration of amino acids that must be present in the claimed composition differs between the ranges indicated in claims 1 and 4.
5. It is contested between the parties whether the incompatibility/inconsistency between the lower limit of the total amino acid concentration in claim 4 ("3.5") and the minimum concentration of the amino acids lysine, alanine and arginine ("8") or cysteine ("2") indicated in claim 1 represents an issue under lack of clarity or insufficiency.
6. The opposition division (decision under appeal, Reasons 20.2) and appellant I held that the inconsistency between the lower limits of amino acid amounts contained in the claimed composition defined in claim 4 in conjunction with claim 1 was not an issue of insufficiency but rather represented a lack of clarity for which compliance with the requirements of Article 84 EPC was not to be examined since this subject-matter was present in the claims as granted too (G 3/14 published in OJ 2015, 102, Headnote).
7. In agreement with appellant II, the board is not convinced thereof.
- 7.1 Since a dependent claim (here claim 4) contains more technical features than an independent claim (here claim 1) on which it depends, the subject-matter of a dependent claim is generally more limited than that of the independent one.

- 7.2 Claim 4 is dependent on independent claim 1 and hence encompasses its subject-matter as a whole, i.e. claim 4 contains all features of claim 1 including its own features.
- 7.3 Claim 4 specifies that the total amount (concentration) of amino acids based on the total dry weight of the claimed composition must be in the range of "3.5 to 36.5 wt%" (emphasis added). This is uncontested. Claim 1, however, specifies that the compositions comprise a combination of two or three amino acids (point 1.1 above), wherein these combinations based on the composition's total dry weight contain a minimum concentration of 10 wt% amino acids (2 wt% of cysteine (if present) and 8 wt% of either lysine, alanine or arginine of which at least one is present in all combinations). If cysteine is absent from the claimed composition, the minimum concentration is 16 wt% (2 x 8 wt% of either lysine, alanine or arginine). This is uncontested as well.
- 7.4 Consequently, although claim 1 requires that the composition contains at least a total amino acid concentration of 10 wt% or 16 wt% (depending on the combination used), claim 4 which encompasses claim 1 specifies that the compositions may contain instead a lower total amino acid concentration of 3.5 wt% only. In other words, the compositions specified in claim 4 are broader than those of claim 1 since claim 4 allows the presence of lower amino acid concentrations in the claimed composition than claim 1. In particular, amino acid concentrations between 3.5 wt% to < 10 wt% may be present in compositions specified in claim 4, while claim 1 excludes these lower concentrations for all amino acid combinations claimed.

- 7.5 The amino acid concentrations encompassed by the compositions specified in claim 4 that are explicitly excluded from the concentration ranges specified in claim 1 represent a significant proportion of the range claimed. In particular, about 20% or 1/5 of the total range "3.5 to 36.5 wt%" (about 6.5% (10%-3.5%) of 33% (36.5%-3.5%)) indicated in claim 4.
- 7.6 Instructions to the skilled person in preparing a composition as defined in claim 4 over substantially the whole breadth claimed, in particular a composition that fulfils substantially all amino acid concentration requirements defined in claim 4 in conjunction with claim 1, are lacking from the patent in suit. Further since the concentration ranges defined in claims 1 and 4 are mutually exclusive, i.e. incompatible, over a substantial part of their ranges, the skilled person cannot technically prepare the composition as defined in claim 4 across substantially the whole breadth claimed - even if taking common general knowledge into account. The subject-matter of claim 4 is therefore insufficiently disclosed.
8. While appellant I admitted that there was an inconsistency between the concentration ranges indicated in claims 1 and 4, this inconsistency exclusively resulted in a clarity issue which was excluded from examination since it was already present in the claims as granted. This was evident from the fact that the skilled person was able to prepare a composition that contained *inter alia* amino acids in the claimed combinations in a concentration range of 3.5 to 36.5 wt% as indicated in claim 4 without further ado.

- 8.1 The board disagrees. While it is true that the skilled person may prepare a composition that comprises *inter alia* alanine, cysteine, arginine and lysine in various combinations in concentrations of 3.5 to 36.5 wt% when looked at in isolation, this is not true for the composition of claim 4 which has to take into account the concentration requirements of claim 1 as well. Such a composition has to contain at least a total concentration of 10 wt% (point 7.3 above) although concentrations in the range of 3.5 wt% to < 10 wt% should be encompassed as well. Due to the incompatibility of these concentration requirements in claims 1 and 4 over a substantial proportion of the range claimed (point 7.5 above), the skilled person cannot prepare for technical reasons a composition that fulfils these requirements across substantially the whole breadth of claim 4.
- 8.2 It is also not possible to simply ignore these lower concentrations encompassed by claim 4 in the preparation of the claimed composition, as suggested by appellant I, merely because they are excluded from claim 1. This would go against the explicit instruction in claim 4 that these lower concentrations are claimed embodiments. The skilled person however, would fail in preparing these embodiments since it is impossible to prepare a composition that contains as a minimum an amino acid concentration of 10 wt% which at the same time contains an amino acid concentration of 3.5 wt%.
9. In a further line of argument appellant I submitted that in a situation where insufficiency arose from a lack of clarity the establishment of lack of clarity was not sufficient for establishing insufficiency. Rather what was required was that the patent as a whole did not enable the skilled person, taking the

description and the common general knowledge into account, to carry out the invention.

- 9.1 According to appellant I the part of the range indicated in claim 4 being broader than that defined in claim 1 was excluded from claim 4 anyhow due to the restrictions defined in independent claim 1. At best this part of the range in claim 4 belonged to the "forbidden area" of the scope of protection of claim 4 which according to the currently predominant approach of the Boards of Appeal was related to an issue under Article 84 EPC and not under Article 83 EPC (Case Law, II.C.8.2.2, in particular T 2290/12, Reasons 3.1).
- 9.2 In this context, appellant I submitted a question of law that should be referred to the Enlarged Board of Appeal for assessing the relationship between so called "forbidden areas" within a claim and their potential assessment under insufficiency. This question reads as follows: *"Is the situation that a dependent claim imposes a wider numerical limit than the independent claim it is depending on, a question of the definition of the "forbidden area" and should thus not be considered under Art. 83 EPC?"*
10. The board agrees with appellant I only insofar that the compositions defined in claims 1 and 4, aside the issue of insufficiency for the reasons indicated above, also suffer from a lack of clarity due to the inconsistency of the concentration ranges indicated in both claims.
- 10.1 According to the case law (Case Law, II.C.6.6.4 and II.C.8.2.2) the issue about a so called "forbidden area" within a claim applies to situations where the reproducibility of an invention is linked with the definition of the scope of invention. It is now a

consensus between the majority of the Boards that the issue of deciding whether the skilled person is working within the scope of the claims or not is an issue under Article 84 EPC. The board in its present composition has no reason to differ therefrom.

- 10.2 In the present case, however, the decisive issue concerns not an ambiguity of the scope of protection of the claimed invention, as would be the case, for example, if a specific compound would be defined by an unclear parameter. In this case standard amino acids are used for preparing the claimed composition that are further specified by standard concentration ranges. Moreover methods for determining these concentrations are standard too. Lastly, the concentration ranges indicated in claims 1 and 4 define clear instructions for the skilled person in preparing the claimed composition. This is all uncontested. Nevertheless, despite these clear instructions in claims 1 and 4, the skilled person cannot prepare the claimed composition over substantially the whole breadth of claim 4 due to the at least in part incompatible or mutually exclusive concentration requirements indicated in claims 1 and 4 for the reasons set out above.
11. Since claim 4 thus contains no "forbidden area", but an area which cannot be prepared for technical reasons, the question submitted by appellant I during the oral proceedings for referral to the Enlarged Board of Appeal is of no relevance for deciding the insufficiency issue of the present case. Appellant I's request to refer this question to the Enlarged Board of Appeal is therefore rejected.
12. Article 100(b) EPC therefore prejudices the maintenance of the patent as granted.

Auxiliary requests 1 to 18

13. Claim 1 of auxiliary request 1 differs from claim 1 as granted in that the feature "*if present in the amino acid combination*" has been added after "*lysine, alanine and arginine*" and after "*cysteine*" in the final paragraph.
14. Claim 1 of auxiliary request 2 combines the subject-matter of claims 1 and 4 as granted.
15. Claim 1 of auxiliary request 3 differs from claim 1 as granted in that the feature "*characterized in that the carrier concentration is in the range of 30-56% by weight, based on the total dry weight of the composition*" has been added at the end of the claim.
16. Claim 1 of auxiliary request 4 combines the subject-matter of claim 1 of auxiliary request 3 and claim 4 as granted.
17. Claim 1 of auxiliary request 5 differs from claim 1 as granted in that the amino acid combination "*cysteine and alanine*" has been deleted therefrom.
18. Claim 1 of auxiliary request 6 differs from claim 1 as granted in that the amino acid combination "*cysteine, lysine and alanine*" has been deleted therefrom.
19. Claim 1 of auxiliary request 7 differs from claim 1 as granted in that the amino acid combination "*lysine and arginine*" has been deleted therefrom.

20. Claim 1 of auxiliary request 8 differs from claim 1 as granted in that the amino acid combination "*cysteine and arginine*" has been deleted therefrom.
21. Claim 1 of auxiliary request 9 differs from claim 1 as granted in that the amino acid combination "*cysteine, lysine and arginine*" has been deleted therefrom.
22. Claim 1 of auxiliary request 10 differs from claim 1 as granted in that the amino acid combination "*lysine, alanine and arginine*" has been deleted therefrom.
23. Claim 1 of auxiliary request 11 differs from claim 1 as granted in that the amino acid combination "*cysteine, arginine and alanine*" has been deleted therefrom.
24. Claim 1 of auxiliary request 12 combines the deletions of claims 1 of auxiliary requests 7 and 10.
25. Claim 1 of auxiliary request 13 combines the deletions of claims 1 of auxiliary requests 7, 8 and 10.
26. Claim 1 of auxiliary request 14 differs from claim 1 as granted in that it has been limited to the amino acid combination "*cysteine, lysine and alanine*", i.e. all other amino acid combinations mentioned in claim 1 as granted have been deleted.
27. Claims 1 and 4 of auxiliary request 15 read:

"1. Use of a composition for the protection of live microorganisms during a drying process using warm gas, said drying process being spray-drying, during storage and/or during reconstitution, said composition comprising a carrier material comprising a

polysaccharide, at least one antioxidant and an amino acid combination selected from cysteine and alanine; cysteine, lysine and alanine; lysine and arginine; cysteine and arginine; cysteine, lysine and arginine; lysine, alanine and arginine; and cysteine, arginine and alanine; wherein the amino acids lysine, alanine and arginine are each present in an amount of 8 to 20 wt.% based on total dry weight of the composition and wherein cysteine is present in an amount of 2 to 10 wt.% based on the total dry weight of the composition".

"4. The use according to any one of the preceding claims, characterized in that the total amino acid concentration is in the range from 3.5 to 36.5 wt%, based on the total dry weight of the composition".

28. Claim 1 of auxiliary request 16 differs from claim 1 as granted in that the feature "*characterized in that the carrier material is selected from maltodextrin, dextrin, cyclodextrin, starch, or cellulose*" has been added at the end of the claim.
29. Claim 1 of auxiliary request 17 differs from claim 1 as granted in that the feature "*characterized in that the antioxidant is vitamin C, vitamin E, glutathione, coenzyme Q10, B-carotene, lycopene or vitamin A or a derivative thereof*" has been added at the end of the claim.
30. Claims 1 and 4 of auxiliary request 18 are identical to those of the respective claims as granted.

31. In summary, the subject-matter of claim 4 as granted is present in auxiliary requests 2 to 18 as well, either in claim 1 (in cases where claim 1 comprises a combination of the subject-matter of claims 1 and 4 as granted: auxiliary requests 2 and 4) or in claim 4 (points 13 to 30 above). This is uncontested. Therefore the objections under insufficiency indicated above for claim 4 as granted apply likewise to auxiliary requests 1 to 18.
32. Accordingly auxiliary requests 1 to 18 do not comply with the requirements of Article 83 EPC. Given this result, no purpose is served by discussing the admission/non-admission of these auxiliary requests into the proceedings.

Auxiliary requests 19 to 32

Admission of auxiliary requests 19 to 32 into the proceedings

33. Auxiliary requests 19 to 32 have been submitted by appellant I only in reply to the board's preliminary opinion. They constitute thus an amendment of appellant I's case which shall, in principle, not be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned (Article 13(2) RPBA).
34. Auxiliary requests 19 to 32 correspond to auxiliary requests 18, 3 and 5 to 17 respectively (see above), except that in all these claim requests claim 4 of the main request has been deleted.
35. As regards auxiliary request 19 and the exceptional circumstances for its submission, appellant I argued that compared to auxiliary request 18 merely dependent

claim 4 had been deleted which did not alter the definition of the claimed invention. This amendment was straightforward, did not add new complexities and simplified the case. Further the filing of this amendment earlier in the proceedings was unreasonable, since the opposition division in their preliminary opinion annexed to the summons as well as in the decision under appeal held that claim 4 as granted suffered from a clarity issue but not from insufficiency. Furthermore the opposition division held in the decision under appeal that the subject-matter of claim 4 as granted was necessary for establishing an inventive step. Claim 4 had thus a further exceptional quality and if auxiliary request 19 would have been filed at the beginning of the appeal proceedings, this would have removed a feature that was potentially necessary for defending the patent, in particular under inventive step. Moreover, since appellant I was confronted with two opponents during the opposition proceedings that moreover raised many different objections, taking into account all of these objections would have resulted in the filing of a very high number of auxiliary requests. Also, in the appeal proceedings, appellant II only raised clarity objections, but no sufficiency objections. These objections were only addressed by the board in its preliminary opinion, without however explaining in detail what the reasons were for this finding. It was thus unclear to appellant I whether the board took further unknown objections under Article 83 EPC into account when it formulated its preliminary opinion.

36. These arguments are not persuasive. Exceptional circumstances do not apply in the present case, since claim 4 as granted has already been objected to under insufficiency in the notices of opposition (opponent

01: section 7.1; opponent 02: sections 7.7 to 7.10). Moreover, this objection has been maintained by appellant II under insufficiency in their grounds of appeal (section 2.4.2) and not, as asserted by appellant I, under lack of clarity. The board shared appellant II's objections under insufficiency in its preliminary opinion (point 28). The reasons provided above under insufficiency for claim 4 as granted are in essence the same as those provided in the preliminary opinion (points 28.1 to 28.4) and correspond to those raised by both opponents in the opposition proceedings and maintained by appellant II in appeal. Accordingly, the objection against the "range feature" in claim 4 as granted did not come as a surprise in the appeal proceedings. Nor has this been argued by appellant I. In view of this course of events, appellant I should have filed auxiliary request 19 at the latest with their reply to appellant II's appeal.

- 36.1 Irrespective thereof, auxiliary request 19 can also not be seen as a request that *prima facie* overcomes all issues at stake in the appeal proceedings. Claim 1 of auxiliary request 19 is identical to claim 1 as granted which has been held by the opposition division to lack an inventive step (decision under appeal, Reasons 22 and point 36 above).
- 36.2 Since exceptional circumstances for filing auxiliary request 19 for the first time at this late stage of the proceedings are therefore missing, auxiliary request 19 is not admitted into the proceedings (Article 13(2) RPBA).
37. The same reasons apply to auxiliary requests 20 to 32 which, like auxiliary request 19, have *inter alia* deleted claim 4 as granted. Also these sets of claims

should have been filed at the latest with appellant I's reply to appellant II's appeal. Thus also these sets of claims are not admitted into the appeal proceedings (Article 13(2) RPBA).

Order

For these reasons it is decided that:

1. The request to refer a question to the Enlarged Board of Appeal is rejected.
2. The decision under appeal is set aside and the patent is revoked.

The Registrar:

The Chair:



K. Boelicke

T. Sommerfeld

Decision electronically authenticated