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**Datasheet for the decision
of 14 January 2025**

Case Number: T 2180/22 - 3.3.06

Application Number: 05744260.0

Publication Number: 1737940

IPC: C11D3/33, C11D11/00

Language of the proceedings: EN

Title of invention:

BINDING AGENT FOR SOLIDIFICATION MATRIX

Patent Proprietor:

Ecolab USA Inc.

Opponent:

Henkel AG & Co. KGaA

Headword:

Bindig agent/Ecolab

Relevant legal provisions:

EPC Art. 123(2)

Keyword:

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

Decisions cited:

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 2180/22 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 14 January 2025

Appellant: Henkel AG & Co. KGaA
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 28 July 2022
rejecting the opposition filed against European
patent No. 1737940 pursuant to Article 101(2)
EPC.**

Composition of the Board:

Chairman J.-M. Schwaller
Members: R. Elsässer
O. Loizou

Summary of Facts and Submissions

- I. The opponent's appeal was directed against the decision of the opposition division to reject the opposition against European patent Nr. 1737940, independent claims 1 and 18 of which read as follows:

"1. A solid composition comprising: a solid binding agent comprising methylglycinediacetic acid and water, wherein the methylglycinediacetic acid cooperates with the water in the formation of the binding agent, and wherein the mole ratio of water to methylglycinediacetic acid present to form the binding agent is in the range of 0.6:1 to 3.8:1; and one or more functional ingredient including a nonionic alcohol ethoxylated/propoxylated surfactant and ethylenediaminetetraacetic acid (EDTA), wherein the binding agent is distributed throughout the solid composition and binds the functional ingredient within the solid composition."

"18. A method of forming a solid composition, the method comprising: providing methylglycinediacetic acid; providing water; providing one or more functional ingredients including a nonionic alcohol ethoxylated/propoxylated surfactant and ethylenediaminetetraacetic acid (EDTA); and admixing the methylglycinediacetic acid with the water such that the methylglycinediacetic acid cooperates with the water in the formation of a solid binding agent, wherein the mole ratio of water to methylglycinediacetic acid present to form the binding agent is in the range of 0.6:1 to 3.8:1."

In the following, the abbreviation *MGDA* is used for methylglycinediacetic acid.

- II. With its grounds of appeal, the opponent argued *inter alia* that the subject-matter of granted claim 1 extended beyond the original disclosure (Article 100(c) EPC).
- III. With its reply, the proprietor and respondent filed three auxiliary requests.
- IV. At the oral proceedings, the proprietor filed two new requests as auxiliary requests 1 and 5; the final requests of the parties were ascertained to be the following:

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

The respondent requested that the appeal be dismissed (main request), or as an auxiliary measure, that the patent be maintained in amended form on the basis of new auxiliary request 1 filed at the oral proceedings, or of one of auxiliary requests 1-3 filed with the reply to the appeal, or of auxiliary request 5 filed at the oral proceedings.

Reasons for the Decision

- 1. Main request
 - 1.1 Interpretation of claim 1 as granted
 - 1.1.1 The board has come to the conclusion that the wording of claim 1 at issue is ambiguous, in that it is not clear therefrom whether the claimed composition needs

to contain both a nonionic alcohol ethoxylated/propoxylated surfactant and EDTA as mandatory components, or whether it also encompasses compositions that contain only one of these components in addition to MGDA and water.

1.1.2 The respondent referred to the formulation "*including a nonionic alcohol ethoxylated/propoxylated surfactant and EDTA*", which made it clear that both functional ingredients had to be present. If the intention had been that only one of the two components was mandatory, another formulation had been used, such as "*including one selected from*".

1.1.3 For the board, the use of the expression "one or more" in claim 1 at issue manifestly suggests that the claim encompasses embodiments that comprises only "one" functional ingredient. It is true that the claim also uses the word "comprising", so that its wording does in principle not exclude the presence of further components, but the fact that the claim presents the two embodiments "one or more" as distinct alternatives suggests that embodiments that comprise only EDTA or only the nonionic surfactant are also covered, so that the claim is ambiguous.

Following the established practice, such a claim should thus be given the broadest technically meaningful meaning; the board has therefore concluded that granted claim 1 encompasses embodiments which, next to MGDA and water, comprise either only EDTA or only a nonionic alcohol ethoxylated/propoxylated surfactant.

1.1.4 As this interpretation had already been presented in the first instance proceedings (see impugned decision, point 5.2), the respondent's request not to admit it

into the proceedings has no basis because it is not an amendment in the sense of Article 12(4) and (6) RPBA.

1.2 Added subject-matter - Article 100(c) EPC

The board has come to the conclusion that the subject-matter of granted claim 1 extends beyond the original disclosure.

1.2.1 Notwithstanding the broad interpretation set out above, the claim explicitly also covers an embodiment that comprises both EDTA and a nonionic alcohol ethoxylated/propoxylated surfactant as functional ingredients, in addition to MGDA and water. As this embodiment is not supported by the originally filed documents, the requirement of Article 123(2) EPC is not met for the following reasons.

1.2.2 Claims 1, 4 and 6, to which the respondent referred, do not disclose the above two functional ingredients, so that reference has to be made to the originally filed description where they are disclosed on pages 9 and 12, respectively, along a plurality of alternative compounds but not as preferred, let alone in combination. Therefore, based on this disclosure, the subject-matter of claim 1 is arrived at by making two selections from very long lists, which thus - according to the case law of the boards of appeal - violates Article 123(2) EPC.

1.2.3 Compositions that contain both components in combination are only disclosed in the example section, in particular in Table 2, where the compositions H, I and J are disclosed as containing Dehypon LS-36 (a surfactant of the claimed type), EDTA, water and the trisodium salt of MGDA.

In contrast thereto, the composition of claim 1 does not contain the MGDA trisodium salt but MGDA as such.

These two compounds are however not identical; this is confirmed by the originally filed description, which distinguishes between MGDA, MGDA derivatives and salts thereof (paragraph bridging page 1 and 2; last paragraph on page 4 of the description as filed).

It follows that the examples *may* support a composition comprising the trisodium salt of MGDA, water and the two functional ingredients, but not the claimed one, which does not comprise the trisodium salt of MGDA, but MGDA as such.

- 1.2.4 The respondent pointed out that MGDA and its trisodium salt fulfilled the same function in the context of the invention; furthermore, the same CAS-Number was used for MGDA and its salt. It also argued that, due to the presence of water in the examples, MGDA was formed by protonation from the salt.
- 1.2.5 These arguments are however not convincing, the latter point being pure speculation, and even if the trisodium salt reacted with the water present in the composition, as suggested by the respondent, the first compound to be formed would be the disodium salt, followed by the monosodium salt. There is also no evidence on file that the compositions of table 2 contain MGDA as such, and even if it did, the composition would contain a specific mixture of various sodium salts of MGDA and MGDA, which would also be unsuitable to support the claimed composition.

The fact that MGDA and its trisodium salt fulfil the same function in the context of the invention is not

relevant in the assessment of added matter, because the disclosure of the MGDA salt in the context of a specific example cannot be considered as a direct and unambiguous disclosure of another - even closely related - compound, namely MGDA as such, regardless of the function the two compounds play in the context of the invention.

With regard to the CAS-number, it is correct that table 2 identifies the MGDA salt with the CAS-Number 164462-16-2 while tables 3 and 4 assign the same number to "MGDA Powder". However, while this finding might show an error in the patent, the respondent has not disputed that this number is in fact the correct number for the trisodium salt of MGDA. Moreover, it can be noted that the corresponding passages in the description (paragraph 0083 and 0085) identify the compounds of tables 3 and 4 as MGDA salt, not as MGDA as such, and even if one came to the conclusion that the patent uses the term "MGDA" as an umbrella term to cover any MGDA, MGDA derivatives and MGDA salts and that claim 1 had to be understood accordingly, the examples would still only provide support for a part of the claimed subject-matter, namely for compositions comprising the trisodium salt.

- 1.2.6 It follows from the above considerations that granted claim 1 extends beyond the content of the application as filed and thus does not meet the requirements of Article 123(2) EPC because the application as filed does not directly and unambiguously disclose a composition comprising EDTA, the claimed surfactant, water and MGDA as such.
- 1.2.7 The respondent argued that the objection discussed above, namely that examples H, I and J (table 2)

disclosed compositions comprising the components EDTA and Dehypon LS-26 (a nonionic alcohol ethoxylated/propoxylated surfactant) only in connection with the trisodium salt of MGDA and water, but not in connection with MGDA as required by claim 1 as granted, should have been filed earlier and not for the first time at the oral proceedings.

For the board, this submission is only a new argument used to further substantiate an objection that had already been made in the first instance proceedings and also with the grounds of appeal, namely that the compositions of examples H, I and J were more specific than the more generic composition of claim 1. As Article 114(2) EPC does not provide basis for disregarding late filed arguments, the board has no reason to disregard it, in particular in view of the fact that the respondent was given an opportunity to file a new auxiliary request in reaction to this objection (see auxiliary request 5).

1.2.8 The appellant further argued that the compositions of the examples were more specific than those claimed also in other aspects, for instance concerning the specific water to MGDA ratios and the specific surfactant used. However, in view of the finding set out above, there is no need to discuss these objections.

1.2.9 It follows from the above considerations that the main request is not allowable under Article 123(2) EPC.

2. Auxiliary request 1

Claim 1 of this request was amended as follows:

"1. A solid composition comprising:

a solid binding agent comprising methylglycinediacetic acid and water, wherein the methylglycinediacetic acid cooperates with the water in the formation of the binding agent, and wherein the mole ratio of water to methylglycinediacetic acid present to form the binding agent is in the range of 0.6:1 to 3.8:1; and two ~~one~~ or more functional ingredients including a nonionic alcohol ethoxylated/propoxylated surfactant and ethylenediaminetetraacetic acid (EDTA), wherein the binding agent is distributed throughout the solid composition and binds the functional ingredient within the solid composition."

- 2.1 This request was filed in reaction to the claim interpretation endorsed by the board, see point 1.1 above.
- 2.2 The amendments were aimed at removing the embodiment from granted claim 1 that was discussed under point 1.1 but not the one objected to in the context of the main request, see point 1.2. Therefore, the amendments are manifestly unsuitable to overcome this objection, so that the first auxiliary request is not allowable under Article 123(2) EPC for the same reasons as the main request.

3. Auxiliary requests 2-4

These requests correspond to auxiliary requests 1 to 3 originally filed with the reply to the grounds of appeal and renumbered auxiliary requests 2 to 4, respectively, during oral proceedings.

- 3.1 Claim 1 of auxiliary request 2 has been amended to include the feature "*wherein the composition is formed*

into a solid shape".

- 3.2 Claim 1 of auxiliary request 3 has been amended to include the feature *"wherein the composition is in the form of a solid block formed within a container."*
- 3.3 In auxiliary request 4, all product claims have been deleted so that claim 1 corresponds to granted claim 18.
- 3.4 As each of these amendments are manifestly unsuitable to overcome the added matter objected to under Article 123(2) EPC in the main request, auxiliary requests 2-4 are not allowable either, for the same reasons. In particular, claim 1 of auxiliary requests 2 and 3 is still directed to a composition comprising EDTA, a nonionic alcohol ethoxylated/propoxylated surfactant, water and MGDA, which combination of features is not directly and unambiguously disclosed in the application as filed, for the reasons given with regard to the main request.
- 3.5 While product claim 1 and its dependent claims are deleted in auxiliary request 4, claim 1 of this request is now directed to a method of forming the same composition that was objected to in the context of the higher ranking requests, namely a composition comprising EDTA, a nonionic alcohol ethoxylated/propoxylated surfactant, water and MGDA. This request is thus manifestly also not allowable, for the reasons set out above.
- 3.5.1 With regard to auxiliary request 4, the respondent pointed out in the reply to the appeal that granted claim 18 had not been attacked under Article 123(2) EPC.

3.5.2 While this is formally correct, the objections brought forward against granted claim 1 however equally apply against granted claim 18, i.e. claim 1 of auxiliary request 4. Consequently, when defending this request, the respondent merely referred to the arguments put forward concerning the main request at the oral proceedings.

4. Auxiliary request 5

Claim 1 of this request was amended as follows:

*"1. A solid composition comprising:
a solid binding agent comprising methylglycinediacetic acid, a salt thereof and water, wherein the methylglycinediacetic acid cooperates with the water in the formation of the binding agent, and wherein the mole ratio of water to methylglycinediacetic acid present to form the binding agent is in the range of 0.6:1 to 3.8:1; and two ~~one~~ or more functional ingredients including a nonionic alcohol ethoxylated/propoxylated surfactant and ethylenediaminetetraacetic acid (EDTA), wherein the binding agent is distributed throughout the solid composition and binds the functional ingredient within the solid composition."*

Corresponding amendments were made in claim 18.

4.1 Claim 1 of this request does not meet the requirements of Article 123(2) EPC either, because a composition that comprises MGDA and an unspecified MGDA salt is not disclosed in the application as filed. As set out above, the examples relied upon by the respondent only disclose compositions comprising a specific MGDA salt, namely the trisodium salt, but no MGDA as such, and in particular not a composition comprising an unspecified

MGDA salt and MGDA.

4.2 In view of this finding, there is no need to decide on the appellant's request not to admit this request as being *prima facie* not allowable.

5. It follows from the above that none of the respondent's requests on file is allowable.

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:



A. Wille

J.-M. Schwaller

Decision electronically authenticated